

The Effectiveness of Group Appeals: Identity Strength and Perceptions of Deservingness*

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Abstract

Citizens' socio-demographic characteristics shape their political preferences, resulting in systematic differences in how social groups vote. These group-differences emerge when there are clear associations between social groups and specific parties. Recent work has shown that one way in which parties can create such linkages and strengthen the association between membership of a social group and electoral support is by means of group appeals. However, what we know about the effects of such appeals on voter support is mostly limited to the role of class-based appeals. By means of a series of vignette experiments embedded in surveys of British voters, we bring insights in the generalizability of the effects of symbolic group appeals for other types of societal groups. We test for the effectiveness of group appeals based on class, rural/urban, education, age, gender and ethnic identities. We also examine whether effects are conditioned by respondents' strength of identity and their perceptions deservingness. Our work provides important insights in the scope conditions of group appeals' effectiveness.

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The political science literature has produced much evidence of the key role that social identities play in shaping citizens' political preferences and their vote choice. In the U.S. context, the pioneering work of Lazarsfeld, Berelson and Gaudet (1968) already drew attention to the role of social factors. Taking a comparative perspective, Lipset and Rokkan (1967) concluded that party competition across established democracies was structured in a fairly stable way by divisions based on citizens' socio-economic status, religion or place of living. These early studies provided the theoretical foundations for much subsequent work studying the socio-demographic correlates of the vote. Work along these lines has shown evidence of important class divisions in electoral behavior (Evans, 2000), of differences based on individuals' religious denomination (Knutson, 2004; Tilley, 2015) and of an impact of the rural/urban character of a voter's locality on their vote choice (Bornschier et al., 2021; Oskarson, 2005).

Despite this abundance of research, we know fairly little about the mechanisms that link citizens' socio-demographic characteristics to their electoral choices. In an attempt to shed light on this question, a number of scholars have drawn attention to the role of parties. More specifically, this work argues that to create a strong connection between a particular social group and a party, it is key that the party clarifies that it represents the interests of that social group (Elff, 2009; Evans and Tilley, 2012, 7). Policy positions, however, are not the only option that parties have to appeal to specific sections of the electorate. A stream of recent publications have drawn attention to the prominence of group appeals in parties' manifestos (Huber, 2022; Thau, 2018, 2019; Stuckelberger and Tresch, Forthcoming). The presence of such content-less group appeals, furthermore, appears to correlate with electoral support among the groups that parties appeal to (Thau, 2021; Stuckelberger and Tresch, Forthcoming). In addition, experimental evidence points out that the effectiveness of such symbolic group appeals is similar to that of policy-centered appeals to specific groups (Robison et al., 2021).

Directly appealing to social groups thus appears to be a useful tool that parties have to connect to specific sections in the electorate. Most of what we know about the ways in which such appeals affect voter support, however, comes from work that has specifically studied working class appeals (notably, the work of Robison et al., 2021). In addition, we lack insights on the mechanisms that explain the effectiveness of group appeals and that shed light on conditions under which group appeals have more or less of an impact on voters' preferences. With this paper, we seek to fill both gaps in the literature. Our first objective is to evaluate whether group appeals are electorally effective beyond a narrow focus on social class. We specifically examine the effectiveness of appeals based on class, the rural/urban cleavage, education, age, gender and ethnic minority status. A second objective is to theorize and test which factors strengthen citizens' responsiveness to group appeals from political parties. Building on the social identity literature, we argue that the strength of citizens' social identities and their perceptions of deservingness of specific groups are key moderators of the effect of group appeals.

We rely on experimental designs that are embedded in surveys among British voters. In Study

1, we included vignettes with appeals based on class, the rural/urban cleavage, education and age. The results of this study indicate that the effect of group appeals is not limited to appeals based on class. We also find that there is important variation between the appeals in terms of how both the in- and the out-groups respond to these appeals. These results hint at the presence of scope conditions, which we explore in more depth in Study 2. The second study consists of a series of pre-registered vignette experiments that were again fielded among a sample of British respondents. Study 2 differs from Study 1 by including a larger number of appeals and, crucially, by including measures of two key moderators: social identity strength and perceptions of deservingness. The results of Study 2 confirm that group appeals increase candidate support across a range of different types of groups. In terms of the scope conditions of this effect, we find that the strength of individuals' group identities somewhat moderates the effects of group appeals. Perceptions of deservingness appear to be more important, however, as we find that whether the group that is appealed to is perceived as deserving better life conditions strongly shapes how the candidate making the appeal is evaluated.

Parties and candidates as mobilizers of group voting

Work that has studied social cleavages and their impact on voting behavior, has described and explained their effect as a process that is not exclusively bottom-up (Deegan-Krause, 2007; Ford and Jennings, 2020) but that partly results from the mobilization of group differences by different actors too. For example, mass parties traditionally could rely on an “intimate collaboration with the cleavage parties’ linkage organisations, that is, the (Catholic) Church and the trade unions” (Elf and Roßteutscher, 2017, p. 15) to foster a connection with a particular section of society. Parties have other means to ensure a linkage with specific sections of the electorate, and given processes such as secularization (Inglehart, 2021) or the decline of trade unions and their connection to social-democratic parties (Piazza, 2001), these other means are arguable increasingly important.

First, in candidate-centered systems, the candidates’ personal characteristics—such as their gender or ethnicity—can serve as cues that appeal to groups that share these characteristics. Much attention has been given to co-ethnic voting (Barreto, 2007), and to the role of gender-affinity between voters and candidates (Dolan, 2008). The appeal of candidates to members of their in-group can be based on the priming of their social identity, but work also shows that candidate-characteristics are used as a cue to infer the ideology and position of candidates on specific issues (O’Brien, 2019). Even though the scholarly literature has focused most on the impact of visible candidate traits like their ethnicity or gender, the evidence of in-group voting is not limited to such characteristics. McDermott (2009), who analyses support for incumbent House candidates in U.S. elections, finds evidence of ‘group association voting’ based on social status. And similar mechanisms are at play at the party-level. Heath (2015), for example, draws attention to a mechanism of ‘social representation’ within parties. Focusing on the British case, Heath (2015) shows that differences between Labour and the

Conservative Party in the representation of working class MPs significantly moderate the strength of class voting. When the Labour Party has a larger proportion of working class MPs, this sends the signal that they are the party of the working class, in turn increasing the likelihood that members of the working class vote for Labour.

An alternative strategy is for a party to clarify its intention to represent the interests of a specific group by means of the issue and policy positions it takes. The importance of this programmatic linkage mechanism is well established in the literature. Focusing on the British case, [Evans and Tilley \(2012, 7\)](#) show that the ideological convergence of the Conservative and Labour parties is a main driver of the decline in class voting in the UK. When the two parties diverge ideologically, in contrast, it appears easier for members of different classes to identify which is 'their' party and to vote accordingly. The connection between the policy positions of parties and the strength of cleavage voting is not limited to the role of class. Over-time variations in the effect of religion on the vote have also been connected to changes in parties' position-taking on moral issues ([Jansen, De Graaf and Need, 2012](#)). In brief, the importance of parties' position-taking as a mechanism that can foster or inhibit the effects of socio-demographic characteristics on the vote is quite clear. In the words of [Elff \(2009, p. 306\)](#): "Voters can decide politically as they are socially only to the degree that available political options reflect or appeal to the voters' specific values or economic interests."

A final and related way for candidates and parties to reach out to specific groups in the electorate is by appealing directly to them in campaign communication. Such a strategy allows even members of a different social group to 'reduce social space' between themselves and the members of the group they are targeting and increase support among the group ([Alamillo and Collingwood, 2017](#)). Group-based appeals are often policy-based and help to clarify to specific groups that the candidate or party shares their position on specific issues, but there is also a rhetorical element in signaling that one cares about a specific group ([Berinsky et al., 2020](#)). The role of such efforts of outreach, during campaigns and by means of TV ads, has been studied extensively with regard to ethnic minorities ([Berinsky et al., 2020](#); [Collingwood, Barreto and Garcia-Rios, 2014](#)) and women ([Kam, Archer and Geer, 2017](#)). Parties' efforts to reach out to specific sections in society, however, are not limited to these groups.

Notably, [Thau \(2018, 2019\)](#) has documented that parties make extensive use of "symbolic group appeals" in their party platforms. Such appeals, which he defines as "explicit statements that link a political party to some category of people" ([Thau, 2019, p. 65](#)) are widely used in party platforms. There are clear patterns in parties' use of appeals to social groups, with a clear tendency for parties to focus on appealing to groups that are their core electorate ([Huber, 2022](#)). Furthermore, the reliance on appeals to specific groups in their campaign communication persists despite claims that current-day parties are increasingly appealing broadly and pursuing catch-all strategies ([Stuckelberger and Tresch, Forthcoming](#)).

There is not only evidence that shows that parties use group appeals strategically, there also are indications that these strategies are electorally effective. Focusing on an important type of such

appeals—class-based appeals—and connecting a detailed coding of appeals in British party manifestos to voter survey data, [Thau \(2021, p. 18\)](#) shows that “working-class voters become more distinct from voters from other classes, the more Labour emphasizes its working class ties.” This suggests that by appealing—even symbolically—to a specific group, parties strengthen their link with that group and gain electoral support among its members. Experimental work confirms the role of symbolic group appeals in shaping citizens’ attitudes towards parties, and their likelihood to support them. Drawing on vignette experiments that were embedded in surveys in Denmark and the United States, [Robison et al. \(2021\)](#) conclude that class-based symbolic appeals ‘work.’ More specifically, they show that working class respondents who saw a vignette that included a symbolic party appeal to the working class were significantly more likely to support the candidate making the appeal than those in the control group.

From work that has studied the effectiveness of ethnic and gender-based appeals, we know that group appeals are not always electorally rewarding, however ([Kam, Archer and Geer, 2017](#)). More specifically, by catering to a specific group, candidates and parties might alienate the out-group ([Hersh and Schaffner, 2013](#)). [Ostfeld \(2019\)](#), for example, shows that informing White Democrats that Democratic candidates are reaching out to Latino voters, reduces their support for the candidate. The effects of group appeals, therefore, might be heterogeneous and differ depending on whether individuals who are exposed to a group appeal are a member of the in-group or not.

The impact of group appeals on voting behavior—in the form of increased support among the group that is appealed to or a backlash among others—has been connected to social identity theory ([Tajfel and Turner, 1979](#)). In short, this theory conceives of people’s sense of who they are as shaped by their membership of specific social groups and the contrast with members of other groups. Group-based appeals tap into these distinctions between groups in society. And by doing so, the appeals render citizens’ in- and out-group memberships more salient—strengthening the impact of these memberships on the vote ([Alamillo and Collingwood, 2017](#); [Ostfeld, 2019](#)). These in- and out-group dynamics inform our main hypotheses about the impact that group appeals have on support for a candidate or party:

Hypothesis 1 *9dgb SbbV8'e V8V fa YdV8VdUS` V[V8FV8bSdfk egbbadf S_ a` YfZWdgb fZSf [eSbbV8W fa/[ZV fZW] ŽYcgbfž*

Hypothesis 2 *9dgb SbbV8'e V8V fa 'ai VdUS` V[V8FV8bSdfk egbbadf S_ a` YfZaeW Za SdW af fZW] Ž Ycgbž*

Conditional effects: Social identity strength and perceptions of deservingness

Previous research that has studied how group appeals shape candidate and party support points to some heterogeneity in how citizens respond to a candidate appealing to a specific social group. In particular, while some work points out that appealing to ethnic or gender-based groups decreases support among the out-group (Hersh and Schaffner, 2013; Kam, Archer and Geer, 2017; Ostfeld, 2019), Robison et al. (2021) did not find evidence of a backlash among non-working class voters who were exposed to a candidate appealing to the working class.

There are good reasons to expect heterogeneity in how voters respond to group appeals, both with respect to reactions among the in-group (i.e., those that are appealed to) and among those who are not member of the in-group. We theorize that the strength of individuals' social identities and their perceptions of deservingness of the group that is appealed to will moderate responses to group appeals.

First, we expect to find that the effects of candidate group appeals—among the in-group as well as among others—will be conditioned by the strength of their relevant social identities. Work in social psychology (Huddy, 2013; Tajfel and Turner, 1979; Tajfel, 1981) has drawn attention to the importance of subjective social identities for shaping in- and out-group dynamics. That is, while for many types of groups individuals can be objectively categorized to be a member of the in-group or not, that does not mean that this group membership is central to their 'self-concept' (Huddy, 2013). Group identities and their strength are more informative in that regard, as they signal not only whether individuals consider themselves—subjectively—a member of the in-group, but also what significance they attach to that group membership (Tajfel, 1981). Work in the field of voting behaviour that has built on the social identity literature provides ample evidence that the strength of identities is what drives the 'political effects of identities' (Huddy, 2013; Huddy, Mason and Aarøe, 2015; Hutchings and Jefferson, 2017). For example, partisan identities influence the vote choice more strongly among strong partisans (Bartels, 2000) and the effects of ideological self-placements on the vote are stronger among voters who identify with an ideological block (Devine, 2015). Based on such insights, we expect that individuals who identify more strongly as a member of a specific group, care more about this membership, and will be more responsive to a candidate or party appealing to their in-group.

There are also reasons to expect the strength of social identities to moderate how individuals who are not a member of the in-group respond to group appeals. This would imply that, for example, when a candidate appeals to those living in cities, individuals who strongly identify as rural would react more negatively to this appeal than those who live in a rural area but for whom their place of living is not an important part of who they are. Previous work that has studied the impact of social identities on voting behavior provides some underpinning for this intuition. Notably, such studies have drawn

attention to the fact that the effects of group threat are larger among individuals who identify more strongly with a group (Garand, Qi and Magaña, 2020; Petrow, Transue and Vercellotti, 2018). This is also in line with social identity theory, that not only predicts that external threat from another group strengthens group solidarity, but also that reactions to threat are more pronounced among those who have strong group identities (Huddy, 2013).

Based on these considerations, we formulate the following conditioning hypotheses:

Hypothesis 3a $H_3a: Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 X_i Z_i + \epsilon_i$

Hypothesis 3b $H_3b: Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 X_i Z_i + \beta_4 W_i + \beta_5 X_i W_i + \beta_6 Z_i W_i + \beta_7 X_i Z_i W_i + \epsilon_i$

As a second moderator, we consider citizens' attitudes toward social groups and more specifically perceptions of deservingness of different social groups. The concept of deservingness has received quite some attention in studies of citizens' welfare attitudes and policy preferences. Specifically, these 'other-regarding considerations' (Cavallé, 2015) have been described as a cognitive heuristic which helps people categorize others in "cheaters" and "reciprocators" (Petersen, 2012) and informs their opinions on collective goods such as social welfare spending and redistribution (Cavallé and Trump, 2015) and also correlates with party preferences (Attewell, 2021).

There is also work that shows that perceptions of deservingness of specific groups can alter in- and out-group dynamics. Studying attitudes about income groups in the United States, for example, Piston (2018) shows that the belief that the poor have less than they deserve not only shapes attitudes about income redistribution but also the vote. In particular, Piston (2018) finds that when it is clear how specific policies affect a group, the perceptions of deservingness of this group shape attitudes about these policies and the vote in favor or against candidates supporting these policies. Even those who are not, objectively, poor can thus hold attitudes and behave in a way that goes against the interests of their own group if they believe the poor have less than they deserve. Perceptions of deservingness also feature in Conover's (1988) cognitive-affective model of the role that social groups play in political thinking. She argues that reactions to an out-group are a function of "assessments of the fairness of a group's status" (Conover, 1988, p.64). Her empirical analyses that focus on gender groups provide evidence that is consistent with this expectation. Specifically, Conover (1988) finds that men hold more political sympathy for women when they perceive there to be much discrimination against women.

As is clear from the work of Piston (2018) and Conover (1988)—who focus on deservingness perceptions for income groups and gender respectively—the development of opinions about how deserving different groups are, is "not limited to immigration status or race, but also imply divisions rooted in class, education, social status, and geography" (Attewell, 2021, p. 613). For a broad set of

different social groups, therefore, people have opinions about whether they are deserving of better conditions or not.

As clear from the previous paragraphs, most scholars who examine perceptions of deservingness highlight the role of these perceptions for understanding individuals' reactions to an out-group. This is rather explicit when deservingness perceptions are referred to as 'other-regarding considerations.' We do not exclude, however, that perceptions of deservingness could also shape how in-groups respond to a group appeal. After all, if members of an in-group are convinced that they are unfairly treated, they should welcome attention from political candidates or parties even more.

Consequently, we hypothesize that perceptions of deservingness will moderate the effect of group appeals among both the in-group and others. Specifically, we hypothesize that perceiving a group as more deserving will move the group appeal effect in the positive direction. That is, if the baseline effect of the appeal is positive its effect should increase in size. If the baseline effect of the appeal is negative, deservingness should bring the coefficient closer to zero, and potentially turn it positive. We thus formulate the following, general hypothesis:

Hypothesis 4 *Perceptions of deservingness moderate the effect of group appeals on political sympathy for working women (and men) such that the effect is more positive (and less negative) when the group is perceived as more deserving.*

We do not have strong expectations about the relative importance of the moderation effects of social identity strength and deservingness respectively. Conover (1988, p. 75), however, found that “[p]olitical sympathy for working women (...) has different roots among men and women. For women it is an out-growth of group consciousness; for men it is triggered by an assessment of women’s position in society.” If these patterns generalize, we could expect to find that social identity strength moderates reactions among the in-group especially, while perceptions of deservingness matter more for how the out-group responds to a group appeal.

Having laid out our theoretical expectations about the effects of group appeals and the factors that might condition their impact, we turn to empirics. We test our expectations by means of two studies and present the design and results from each of these studies in turn.

Study 1: Reactions to different types of group appeals

Data and design

The main objective of Study 1 is to verify whether and to what extent the effectiveness of group appeals generalizes beyond a narrow focus on working class appeals. The design replicates and extends the approach of Robison et al. (2021), who examined the impact of appeals to the working class by means of vignette experiments that they fielded in online surveys in Denmark and the United States.¹

¹On the one hand Study 1 is a direct replication of Robison et al. (2021) in a different setting. On the other hand, Study 1 examines the presence of group appeal effects for new group categories and is thus exploratory. For these reasons, Study

We focus on the British context, and embedded experimental vignettes in an online survey among a sample of 1,500 British respondents of 18 years and older. The survey was administered by YouGov between 21 and 27 January 2021, and is representative for the UK population in terms of gender, age, race and education. By focusing on the UK context, we extend the findings of Robison et al. (2021) to a third setting (they studied class appeals in Denmark and the US). If class appeals have a similar effect on voters in the UK, we would thus be even more confident that this is a pattern that generalizes across cultures and institutional settings. Furthermore, the UK context is a setting where the role of class identities is known to be very strong. Exploring whether other types of appeals have effects that are similar to those of appeals to class-groups in the UK can therefore be considered a hard test.

Respondents in Study 1 were randomly assigned to one of five groups: a control group and four group appeal treatment groups. All respondents saw the following information:

Please carefully read the following information about a hypothetical candidate in a UK Parliamentary General Election.

[David Smith/Susan Smith] is running for a seat in the UK House of Commons as a member of the [Labour/Conservative] Party.

Note that the introductory presentation of the hypothetical candidate—that was the only information that respondents in the control group saw—randomizes the gender of the hypothetical candidate (either David or Susan Smith) as well as the party for which they are a candidate (Labour or Conservative Party). Including information on the candidate's gender and their party provided respondents in the control group with some information to allow them to form an opinion about the candidate. Even though it is not our focus, the randomization also allows accounting for the effects of gender and party in respondents' evaluations of the candidates.

For respondents in the treatment groups, the vignette was complemented with a group appeal, in the form of the following scripts:

I ad] [YUSæh[Y VFW

[David Smith/Susan Smith] recently said: “Too much attention has been given to businesses in recent political debates. We in the [Labour/ Conservative] Party believe it is time for politicians to prioritize workers. As a Member of Parliament, I will work to better represent the interests of workers.”

DgdS^SdV h[Y VFW

[David Smith/Susan Smith] recently said: “Too much attention has been given to the big cities in recent political debates. We in the [Labour/ Conservative] Party believe it is time for politicians to prioritize rural areas and small towns. As a Member of Parliament, I will work to better represent the interests of those living in rural areas and small towns.”

I was not pre-registered. Our main confirmatory research in Study 2, however, was pre-registered before data collection.

@a` žg` [hVtEfk YcSVgSAh[Y VffW

[David Smith/Susan Smith] recently said: “Too much attention has been given to university graduates in recent political debates. We in the [Labour/ Conservative] Party believe it is time for politicians to prioritize people without university degrees. As a Member of Parliament, I will work to better represent the interests of **people without university degrees.**”

Kag` YbVtAb`Mh[Y VffW

[David Smith/Susan Smith] recently said: “Too much attention has been given to the elderly in recent political debates. We in the [Labour/ Conservative] Party believe it is time for politicians to prioritize young people. As a Member of Parliament, I will work to better represent the interests of young people.”

The scripts mention the gender and the party of the candidate, matching the information provided in the introduction of the vignette. In addition, the scripts provide information on a specific group that the candidate is symbolically appealing to. The candidate does not take a policy position, but simply mentions that they will work to better represent a specific group (in opposition to the out-group). These vignettes closely follow the wording of the experimental treatments of [Robison et al. \(2021\)](#), who have previously shown indications of the effectiveness of working class appeals. The only difference in wording relates to the specific groups that the candidate appeals to.

Immediately following the vignettes, respondents were asked to rate a candidate with the political views like those of the hypothetical candidate presented in the vignette, on a scale from 0 (= thinks very poorly of him/her) to 10 (= thinks very highly of him/her). This dependent variable again follows the design of [Robison et al. \(2021\)](#), corresponding to their Study 1. Next, respondents were also asked to indicate how likely they would be to vote for the hypothetical candidate, should they run in their constituency at the next election. Respondents had to indicate their likelihood on an 11-point scale, from 0 (= not likely at all) to 10 (= very likely). For the main results, we focus on respondents’ answers with regard to candidate evaluations. Effects for vote likelihood are reported in Appendix C.

Estimation approach

We hypothesized that individuals’ reactions to a group appeal are a function of whether they are a member of the in-group (H1) or not (H2). In line with our first hypothesis, we expect that for those who are in-group members, exposure to a group appeal will increase candidate support among the group that is appealed to, in comparison to the control group. Furthermore, our second hypothesis predicts that among respondents who are not members of the in-group, exposure to the treatment will decrease candidate support—also in comparison to the control group. To examine the appeal

of the group appeals among in- and out-groups, we thus have to consider their personal characteristics and categorize them as either a member of the in-group or the out-group. For the working class appeal, we distinguish between respondents who self-identify as working class and all others. For the urban/rural cleavage, we rely on a question that asked respondents whether they would say they live in a ‘Rural area or village’, a ‘Small or middle size town’ or a ‘Large town or city’. We code respondents who choose one of the first two options as individuals who live in a small town, versus all others. Third, we use information on the age at which respondents finished education. We code those who indicate they finished education at 20 or later as higher educated, and contrast them to all others. Finally, for young versus older respondents, we dichotomize the sample by age—coding all respondents below 35 as ‘young’. In additional analyses, we also add more nuance to the analysis of the young people appeal by assessing responses in six different age groups.²

To test Hypotheses 1 and 2, we estimate a linear model of the following form:

$$y = \beta_0 + \beta_1 \text{In-group member} + \beta_2 \text{Group appeal treatment} + \beta_3 \text{In-group member} \times \text{Group appeal treatment} + \beta_4 \text{Labour candidate} + \beta_5 \text{Female candidate} +$$

where y captures respondents’ rating of the candidate, β_1 is a dummy variable that is coded 1 when a respondent is a member of the in-group that is targeted by the candidate’s appeal and zero otherwise, β_2 is a dichotomous indicator that is coded 1 if the respondent was assigned to a group appeal vignette and 0 if they were in the control condition. To increase the precision of the estimates, we also include an indicator of which party the candidate in the vignette was shown to be a candidate for (which was randomized), we do so by including β_4 which is coded 1 if the candidate is Labour and 0 if they are Conservative.³ For the same reason, we account for the gender of the candidate shown in the vignette, by including the variable β_5 which was coded 1 if the vignette referred to Susan Smith and 0 if it referred to David Smith. We estimate separate models for each of the different treatments, assessing the impact of appeals to the working class, people living in rural areas and small towns, non-university graduates and young people respectively.

Results

We summarize the results graphically, focusing on the average marginal effect of exposure to a group appeal (versus the control) among those who are coded as members of the in-group and others. Full estimates can be found in Appendix A.

We start with the results for the working class appeal, which is a close replication of the work of

²Specifically, we code the following six age groups: 18–24, 25–34, 35–44, 45–54, 55–64 and 65+ years old.

³In Appendix H we show that the effects are robust replacing the Labour candidate variable by a variable that captures whether a respondent is a partisan of the candidate’s party.

Robison et al. (2021). The upper left panel in Figure 1 shows the results for this appeal. The coefficient to the right in the panel shows an effect that is consistent with H1. That is, among respondents who self-identify as working class, exposure to the candidate appealing to the working class significantly increases their evaluation of the candidate, relative to the control (i.e., a positive and significant AME). The estimated effect of exposure to an appeal to the working class among those who do not self-identify as working class (the left-hand coefficient in the same panel), in contrast, does not show the expected pattern. More specifically, while we had hypothesized that among those who are not the in-group, exposure to a group appeal would weaken candidate support (H2), the results for the appeal to workers in Figure 1 indicates that even among this group candidate support increases as a result of exposure to the working class-appeal treatment.

The results for the appeal to workers, closely mirror the findings of Robison et al. (2021). They also failed to find evidence of a backlash effect of a working class appeal among non-working class voters. Overall, the results for the working class treatment suggest that appealing to the working class is potentially an electorally rewarding strategy. Doing so fosters support among the working class, while not really leading to a backlash among others. But can the effectiveness of group appeals be extended beyond an application to a strong identity-based cleavage like the class cleavage?

The upper right panel in Figure 1 shows the results for the second vignette, that exposed respondents to a candidate appealing to people living in rural areas and small towns. As can be seen from the graph, this type of appeal affected candidate support in ways that are very similar to what we found for the appeal to the working class. Among respondents who live in small towns or rural areas (i.e., the in-group), the rating of the candidate is significantly higher than in the control. The substantive effect of this treatment, furthermore, is very similar to what we found for the working class appeal. While the results thus provide support for H1, in line with the working class appeal, the appeal to people living in rural areas or towns also did not produce a backlash in candidate support among the out-group. Among the out-group, the average marginal effect of exposure to the appeal on candidate support is even positive, though it is not significantly different from zero.

The third treatment allows examining the effectiveness based on appeals to specific educational groups. The results in the bottom left panel in Figure 1 suggest that the lower educated (those who finished education before 20) rate the candidate significantly more positively when they appeal to non-university graduates than in the control. Furthermore, while we hypothesized a negative coefficient for appeals among the out-group (higher educated individuals in this case), the bottom left panel Figure 1 shows a positive—but insignificant—average marginal effect among this group. In sum, the results for this treatment are quite consistent with those for the working class and rural area appeals in showing both support for H1 and failing to offer evidence in line with H2.

Finally, we turn to the fourth treatment, that includes an appeal to young people (in opposition to the elderly). To examine how this appeal alters candidate evaluations in the in- and out-group, we focus on the contrast in reactions between voters under 35 and all others. For this treatment, the pic-

ture that emerges from the bottom right panel in Figure 1 differs from that of the other group appeals. On the one hand, there are no indications that young respondents (as defined here) react positively to a candidate appealing symbolically to young voters. The results, therefore, do not provide support for H1. Second, for this specific type of appeal there is evidence of a significant backlash effect. As can be seen from the left-hand coefficient, those who are 35 years and older react negatively to the candidate appealing to the young, and are evaluating the candidate significantly less positively when exposed to the appeal compared to the control. For this specific type of appeal, hence, the results offer support for H2.

Overall, the results of Study 1 show that group appeals shape candidate support. In most cases, group appeals boost candidate support among the in-group. The clear exception, however, is the treatment that included a symbolic appeal to young voters. For this treatment, not only do young voters (operationalized here as those under 35) not respond to the appeal, there also is evidence of a backlash among older voters. In Appendix B, we also show that the lack of support for H1 is not driven by the somewhat arbitrary cut-off of 35 years old to categorize respondents in either the in- or the out-group.

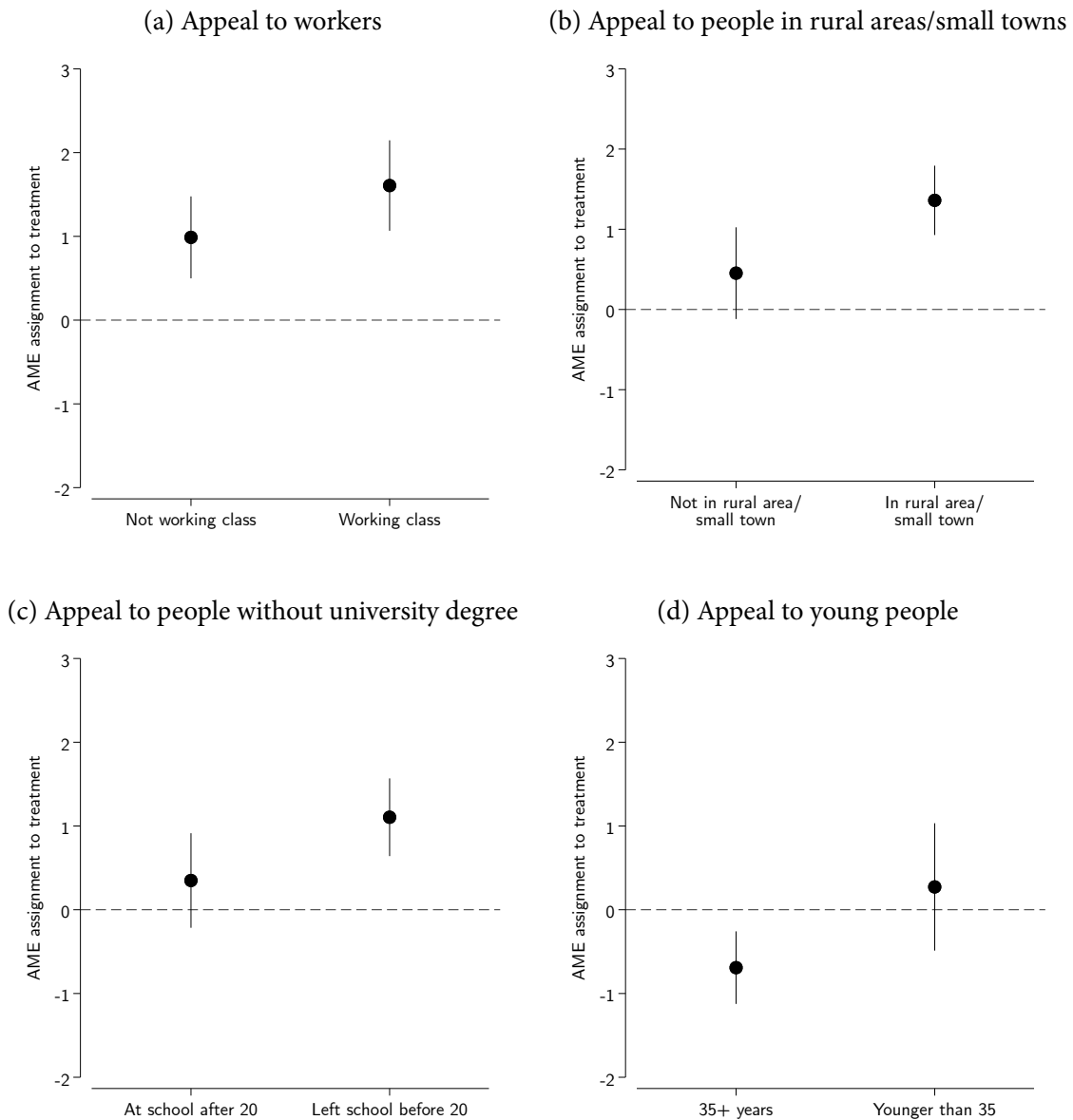
Robustness

We verified the robustness of the results of Study 1 in a number of ways. First, our main conclusions also hold when examining the effect of group appeals with respect to vote likelihood instead of a measure of candidate support. As can be seen from the estimates that are reported in Appendix C, effects are generally weaker when analyzing vote likelihood. But those results still provide evidence for in-group effects in response to appeals to the working class, people in rural areas and non-university graduates. These results also still fail to show evidence of a backlash against such appeals among those who are not in the in-group. Finally, when focusing on vote likelihood too, the results indicate that the out-group negatively responds to a candidate appealing to young people.

Second, while we did not have a priori expectations about whether these different types of group appeals would have different effects based on the party of the hypothetical candidate, additional analyses that are reported in Appendix D show the results broken down by the party of the candidate (i.e., Labour or Conservative). While the estimates are not identical for the two parties, they are very imprecise, and we cannot discern a systematic pattern in terms of how respondents react to appeals from Labour versus Conservative candidates. It is noteworthy, however, that out-groups react more positively to a Conservative candidate appealing to the working class or lower educated than to a Labour candidate doing so.

Third, instead of accounting for a dichotomous indicator of the candidate's party as we do in the main analyses, we also replicated models with a measure of shared partisanship. That is, we replaced the Labour/Conservative candidate variable by a measure that captures whether the respondent is a partisan of the candidate's party. As can be seen from the results that are reported in Appendix H,

Figure 1: Impact of exposure to a group appeal among in-groups and others, Study 1 results



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

doing so does not affect the conclusions.

Summary of Study 1 results

The results from Study 1 indicate that the effectiveness of group appeals is not limited to class-based appeals. Study 1 suggests that appealing to working class voters, people living in rural areas and the

lower educated can all increase candidate support among those groups. Furthermore, none of these appeals seem to come at a cost in terms of how out-groups respond to the appeals. The pattern is the exact opposite for appeals to young people, which is a type of appeal that is negatively received by out-groups and does not boost support among the young. Overall, the results suggest that there is important variation in how voters react to different types of appeals. Potentially, the lack of negative reactions to appeals to the working class, rural voters or the lower educated among out-groups could be driven by the fact that these groups are perceived as deserving better conditions in life. And it is also not implausible that the lack of strong in-group effects for appeal to young people reflects a lack of strong age-based identities. Study 2 seeks to more systematically examine these sources of variation and heterogeneity in how voters respond to different types of group appeals.

Study 2: Different types of group appeals and heterogeneity in responses to group appeals

Experimental design and data

The data for Study 2 come from an online survey among 3,200 British respondents over 18 years old. The data-collection was administered by YouGov and the fieldwork ran from 13 to 20 June 2022. Before collecting the data for Study 2, we preregistered our design, expectations and analysis plan on OSF.⁴ The objectives of Study 2 were to verify the robustness of the Study 1 findings, and to assess heterogeneity in the effects of group appeals—with a focus on social identity strength and perceptions of deservingness.

The basic set-up of the experimental design for Study 2 differed from that of Study 1. Most importantly, to increase the analytical power, treated respondents were exposed to multiple appeals. Specifically, one third of all respondents (N = 1,054) were assigned to a control condition, in which they received the following information—with a randomization of the candidate's party:

5a` fcb^Ydgb h[Y VffW

The candidate is a member of the [Labour/Conservative] Party.

The remaining two thirds of respondents (N = 2,146) were assigned to a treatment arm and got to see seven different vignettes. The order in which these vignettes were shown to respondents was randomized. These vignettes, shown below, included appeals to the working class, to people living in rural areas and small towns, to non-university graduates, to women, to the elderly and to ethnic minorities. A seventh vignette consisted of a broad appeal to all groups, a contrast on which we elaborate in the discussion section of the paper.

⁴The anonymized pre-analysis plan can be accessed here https://osf.io/zgxt7/?view_only=2f09af89c27f4018ae7204d529a9b0b2.

Following each vignette (one vignette for the control, seven vignettes for those in the treatment arm), respondents were immediately asked “How would you rate a candidate like this on a 0 to 10 scale? 0 means that you think “very poorly” of them and 10 means that you think “very highly” of them.” These candidate ratings are the dependent variable in the analyses for Study 2.⁵

As a comparison of the vignettes used in Study 1 and Study 2 clarifies, the Study 2 vignettes are shorter and focus on the group that is appealed to—without contrasting them to a specific out-group. Our inclusion of a contrast in Study 1 followed the design of Robison et al. (2021). Because it is possible that the initial effects are driven by both parts of the statement (i.e., the appeal to an in-group and a negative reference about an out-group), and to reduce the burden on respondents in the treatment arm, we pilot-tested whether a shorter and simplified version of the vignette that only appeals to an in-group has similar effects as the original vignettes and found it does.⁶

DgcS^SdVh[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: “We in the [Labour/Conservative] Party believe it is time for politicians to prioritize people living in rural areas and small towns more. As a Member of Parliament, I will work to better represent people living in rural areas and small towns.”

@a` žg` [hVd]fk YcSVgSFVh[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: “We in the [Labour/Conservative] Party believe it is time for politicians to prioritize people without university degrees more. As a Member of Parliament, I will work to better represent people without university degrees.”

I a_ W h[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: “We in the [Labour/Conservative] Party believe it is time for politicians to prioritize women more. As a Member of Parliament, I will work to better represent women.”

⁵As mentioned previously, Study 1 included both candidate ratings and a vote likelihood question. To reduce the burden on respondents, especially those in the treatment arm, we limited Study 2 to a single outcome variable.

⁶We pilot-tested whether a simplified version of the vignette has similar effects as one that includes references to both the in- and the out-group with a focus on a working class appeal. The pilot survey was fielded in February 2022 on the Prolific platform among a sample of 1,002 respondents in the United Kingdom. We divided respondents in three groups: (1) a control group that only received information on the party of the candidate; (2) a treatment group that was shown a vignette with party information and in which the candidate appealed to the working class and contrasted the interests of the working class to those of the upper middle class; (3) and a second treatment group that was provided with information on the candidate’s party and a simplified appeal that focused solely on the in-group (i.e., the working class). We found that both treatments increased support for the candidate among working class voters and that the effects of the two treatments could not be distinguished. See Appendix E for the results of the pilot study.

7^Wdk h[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: “We in the [Labour/Conservative] Party believe it is time for politicians to prioritize the elderly more. As a Member of Parliament, I will work to better represent the elderly.”

7fZ` [U_ [adfk h[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: “We in the [Labour/Conservative] Party believe it is time for politicians to prioritize ethnic minorities more. As a Member of Parliament, I will work to better represent ethnic minorities.”

4cbSV SbbV8^h[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: “We in the [Labour/Conservative] party believe it is time for politicians to stop differentiating between different groups in society. As a Member of Parliament, I will work to represent everyone.”

By showing seven vignettes to respondents in the treatment arm, Study 2 was designed to maximize the precision of the estimates. We acknowledge, however, that this design also has limitations. Specifically, given that vignettes are all very similar, showing seven different vignettes to respondents in the treatment group might result in demand effects (Clifford, Sheagley and Piston, 2021). We therefore verify how the order of the vignettes affects results in the robustness section.

Using the data from Study 2, we pursue tests of all hypotheses, both the main ones and the hypotheses that concern conditional effects. The main independent variables for testing Hypotheses 1 and 2 are a variable identifying whether a respondent is randomly assigned to a treatment that includes an appeal targeted at a specific group and variables that identify whether the respondent is a member of the targeted group (i.e., in-group) or not. As mentioned before, the vignettes in Study 2 include appeals to the working class, people living in rural areas, people without university degrees, women, elderly people and ethnic minorities. To identify whether respondents’ group membership implies they are targeted by these appeals, we rely on standard measures of each of these socio-demographic characteristics. For details, see Appendix F.

To test Hypotheses 3a and 3b, we require measures that capture how strongly in-group respondents identify with the in-group or a group that is not targeted by the appeal. To capture identity strength, we asked respondents to indicate how important their class, ethnic or racial background,

⁷We replaced the appeal to young people from Study 1 with an appeal to the elderly in Study 2. This shift allows us to verify whether the age-effects in Study 1 are due to the focus on age groups in general or whether they result from the choice of age-group in the vignettes. In this regard, it is noteworthy that the descriptive results for the deservingness perceptions towards young and old people in Appendix F suggests that the elderly are perceived as more deserving than young.

place of living, gender, age group and educational background were to their sense of who they are. Respondents were asked to indicate the importance of each of these items⁸ on a scale from 0 to 10, where 0 means “not important at all” and 10 means “very important”.

Furthermore, testing Hypothesis 4 requires indicators of how deserving respondents think different social groups are. We asked respondents to indicate, for ten different groups, whether they thought that most people in each of the groups have poorer life conditions than they deserve, better life conditions than they deserve or just about the life conditions that they deserve? Respondents indicated their responses on a scale from 0 to 10, which was reverse coded to ensure that higher values correspond to a more deserving group (i.e., the group has poorer life conditions than they deserve). In the analyses, we focus on the deservingness perceptions for the working class, people living in rural areas and small towns, people without a university degree, women, the elderly, and ethnic minorities. Appendix F provides details on this question, including the distribution of answer patterns for all items.

We measured respondents’ socio-demographic characteristics, their identity strength and deservingness perceptions first and included the vignettes at the end of the survey. Note that following the measurement of the socio-demographic variables and the key moderators, the questionnaire included a political knowledge quiz that served as a distractor task and that should reduce the effects of priming social identities on the treatment effects (see also, Anson, 2018; Kam, 2007).

Estimation approach

To test Hypotheses 1 and 2, we estimate linear models of the following form:

$$y = \beta_0 + \beta_1 \text{In-group member} + \beta_2 \text{Group appeal treatment} + \beta_3 \text{In-group member} \times \text{Group appeal treatment} + \beta_4 \text{Labour candidate} + \beta_5 \text{Attention check} + \epsilon$$

where y captures respondents’ rating of the candidate, In-group member is a dummy variable that is coded 1 when a respondent is a member of the in-group that is targeted by the candidate’s appeal and zero otherwise, $\text{Group appeal treatment}$ is a dichotomous indicator that is coded 1 if the respondent was assigned to a group appeal vignette and 0 if they were in the control condition. To increase the precision of the estimates, we also include an indicator of which party the candidate in the vignette was shown to be a candidate for (which was randomized), we do so by including Labour candidate which is coded 1 if the candidate was from Labour and 0 if they are Conservative. In line with our pre-analysis plan, we also control for whether respondents correctly answered an attention check question.⁹

⁸The different items were presented in a random order. See Appendix F for more details on the question wording.

⁹Specifically, this question asked respondents to recall the party of the candidate in the vignette (for respondents in the control arm), or the party of the candidate in the last vignette they saw (for respondents in the treatment arm).

We first assess effects for each specific group appeal vignette, each time contrasting responses in the treatment arm with those in the control. In a second step, we estimate a pooled model to obtain an overall estimate of the effect of the group appeal among the in-group and others respectively.

To test Hypotheses 3a, 3b and 4, we have to test whether the β_2 and β_3 coefficients of the earlier equations are conditioned by the strength of respondents' social identities and their perceptions of deservingness respectively. Empirically, we do so by adding to the equation a three-way interaction term, and all constitutive terms. For testing Hypothesis 3a and 3b, we thus estimate a linear regression model of the following form:

$$\begin{aligned}
 y = & \beta_0 + \beta_1 \text{In-group member} + \beta_2 \text{Group appeal treatment} + \beta_3 \text{Group identity strength} \\
 & + \beta_4 \text{In-group member} \cdot \text{Group appeal treatment} \\
 & + \beta_5 \text{In-group member} \cdot \text{Group identity strength} \\
 & + \beta_6 \text{Group identity strength} \cdot \text{Group appeal treatment} \\
 & + \beta_7 \text{Group identity strength} \cdot \text{In-group member} \cdot \text{Group appeal treatment} \\
 & + \beta_8 \text{Labour candidate} + \beta_9 \text{Attention check} +
 \end{aligned}$$

To facilitate the interpretation of the effects, we calculate the average marginal effect (AME) of the group appeal treatment, as the strength of group identity increases. We do so for in-group members (In-group = 1) and those who are not in the in-group (In-group = 0) separately. According to Hypothesis 3a, the AME of the group appeal treatment will increase as identity strength increases when in-group = 1. Hypothesis 3b supposes that the AME of the group appeal treatment will decrease as identity strength increases when in-group = 0.

For testing Hypothesis 4 rely on a similar empirical set-up. We again estimate a model that includes a three-way interaction in order to evaluate whether perceptions of deservingness condition the effects of the group appeals, for the in-group and those who are not member of the in-group. Formally, we estimate the following linear model:

$$\begin{aligned}
 y = & \beta_0 + \beta_1 \text{In-group member} + \beta_2 \text{Group appeal treatment} + \beta_3 \text{Deservingness perception} \\
 & + \beta_4 \text{In-group member} \cdot \text{Group appeal treatment} \\
 & + \beta_5 \text{In-group member} \cdot \text{Deservingness perception} \\
 & + \beta_6 \text{Deservingness perception} \cdot \text{Group appeal treatment} \\
 & + \beta_7 \text{Deservingness perception} \cdot \text{In-group member} \cdot \text{Group appeal treatment} \\
 & + \beta_8 \text{Labour candidate} + \beta_9 \text{Attention check} +
 \end{aligned}$$

The quantities of interest for evaluating support for the hypothesis are the AMEs of the group

appeal treatment, for varying levels on the indicator of deservingness. According to Hypothesis 4, the AME of the group appeal treatment will become more positive as the group is considered more deserving.

The main results presented in the paper show the moderation effects based on a pooled analysis of the stacked data in which respondents are included as many times as there are group appeal vignettes. For all pooled analyses, we cluster the standard errors at the level of individual respondents.

Results

Figure 2 shows the effects of the group appeals, for each of the six groups considered in Study 2, by respondents' in-group status. These estimates are based on appeal-specific models, in which respondents assigned to a specific vignette are consistently compared to the control group. In each panel, the coefficients show the average marginal effect of being assigned to a vignette (versus the control condition). The right-hand coefficient in each panel shows the AME for the group that is appealed to, while the coefficients to the left show the AMEs for those who are not members of the in-group.

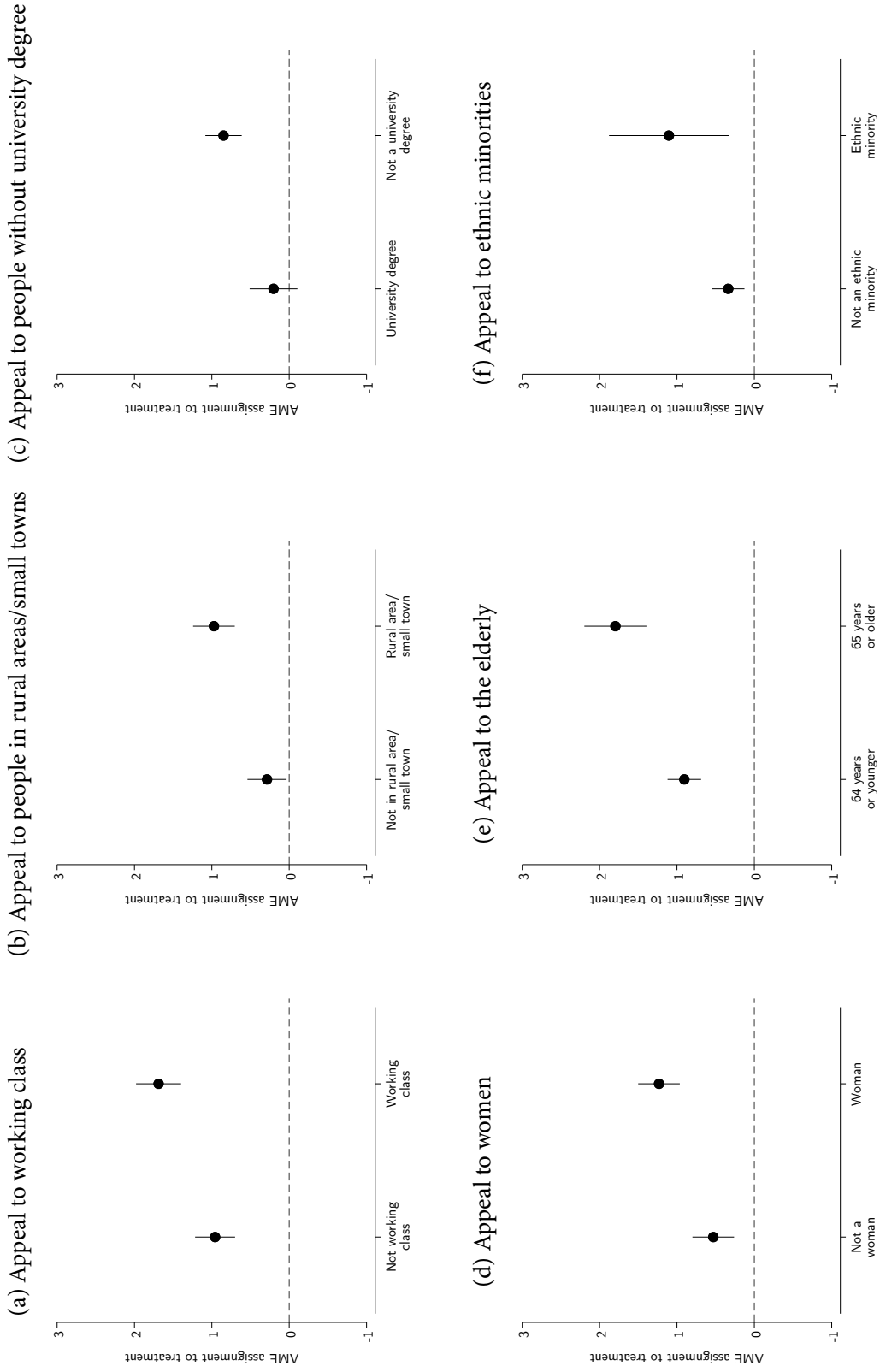
The top row in Figure 2 shows the effects for group appeals that were also considered in Study 1. This includes an appeal to the working class, an appeal to people living in rural areas and small towns, and an appeal to people without a university degree. As can be seen from Figure 2, respondents reacted in largely the same way to these appeals as respondents in Study 1 did. For each of the appeals, the in-group responded positively to the appeal, rating the candidate making the appeal between 0.8 (for the education-based appeal) and 1.7 points (for the class-based appeal) more positively than the control group. Also in line with what we observed in Study 1, for none of these appeals there is evidence of a backlash effect among respondents who are not targeted by the appeal. In fact, in each of the three cases the AME of assignment to the appeal was *baeff/hv* among non-in-group respondents, though the effect can only be distinguished from zero in the case of the appeal to the working class.

The bottom row in Figure 2 shows the estimates for the three appeals that were not included in Study 1. This includes the appeal to the elderly, the appeal to women, and the appeal to ethnic minorities. As can be seen from the estimates in Figure 2, the in-group effects for these three types of appeals are consistent with H1. Respondents of 65 years old and older, women, as well as ethnic minorities all respond positively to a candidate appealing to them. The average marginal effects, furthermore, are quite sizeable. Specifically, women rate a candidate who appeals to them 1.2 points more positively than a candidate who does not appeal to them. Older respondents rate a candidate appealing to the elderly 1.8 points more positively than a candidate who does not make an appeal. Ethnic minority respondents, finally, rate a candidate appealing to ethnic minorities 1.1 points more positively compared to a candidate not making an appeal. Across groups and for a varied set of group appeals, therefore, candidates who appeal to specific groups significantly and substantially increase their support among that group.

Turning to the effects of group appeals among respondents who are not members of the in-group,

the effects that are shown on the bottom row of Figure 2 offer further evidence against H2. For none of these three types of group appeals there is evidence of a backlash among respondents who are not members of the in-group. On the contrary, for each of the three appeals holds that non-in-group members evaluate a candidate making a group that is not theirs more positively than a candidate who is not making an appeal (i.e., the control). These effects among non-in-group members, furthermore, are often substantial and statistically different from zero in each case.

Figure 2: Impact of exposure to a group appeal among in-groups and others, Study 2 results



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

Having confirmed that each of the vignettes has the intended effect among members of the in-group, and also increases candidate support among non-in-group members, we now turn to a pooled analysis of the stacked dataset. In this dataset, each respondent is included six times, for each of the six comparisons between a group appeal effect and the control.

Table 1 shows the estimates of two sets of OLS regression models, in which we explain candidate evaluations based on in-group status and assignment to a group appeal. Model 1 is our baseline model, which includes a control for whether the candidate in the vignette was a Labour candidate (vs. a Conservative) and whether respondents answered the attention check question correctly. The group appeal indicator expresses the treatment effect when the in-group member indicator is 0 (i.e., among outgroup voters), while the effect among in-group voters is obtained by adding the interaction term to that estimate. The estimates of Model 1 suggest that among those who are not a member of the in-group, exposure to a group appeal increased their rating of the candidate 0.6 points. For in-group members, the effect is about double the size—meaning they rate a candidate appealing to them 1.2 points more positively than a candidate who is not appealing to a group. Table 1 also shows that effects are essentially the same when we account for shared partisanship instead of a dummy variable distinguishing between Labour and Conservative candidates. These effects provide strong evidence in favor of H1 while failing to provide evidence for H2.

Table 1: Explaining candidate evaluations, impact of exposure to a group appeal – pooled Study 2 results

	(1)	(2)
In-group member	0.130 (0.071)	0.107 (0.061)
Group appeal	0.559 (0.099)	0.564 (0.091)
In-group member Group appeal	0.656 (0.085)	0.669 (0.076)
Labour candidate	0.741 (0.068)	
Partisan of candidate's party		2.011 (0.069)
Passed attention check	-0.198 (0.076)	-0.326 (0.075)
Constant	4.588 (0.113)	4.522 (0.102)
<i>N</i>	19036	19036
<i>R</i> ²	0.059	0.151

Standard errors (in parentheses) are clustered by respondent.

$p < 0.05$, $p < 0.01$, $p < 0.001$

Most importantly, however, Study 2 allows assessing whether the heterogeneity in individuals' responses to a candidate making a group appeal can be explained by variation in the strength of individuals' group identities, and variation in terms of the extent to which the groups that are appealed to are perceived as deserving. To test H3a, H3b and H4, we expand the baseline pooled model in Table 1 (Model 1) to include three-way interactions with the measures of identity strength and deservingness perceptions, respectively.

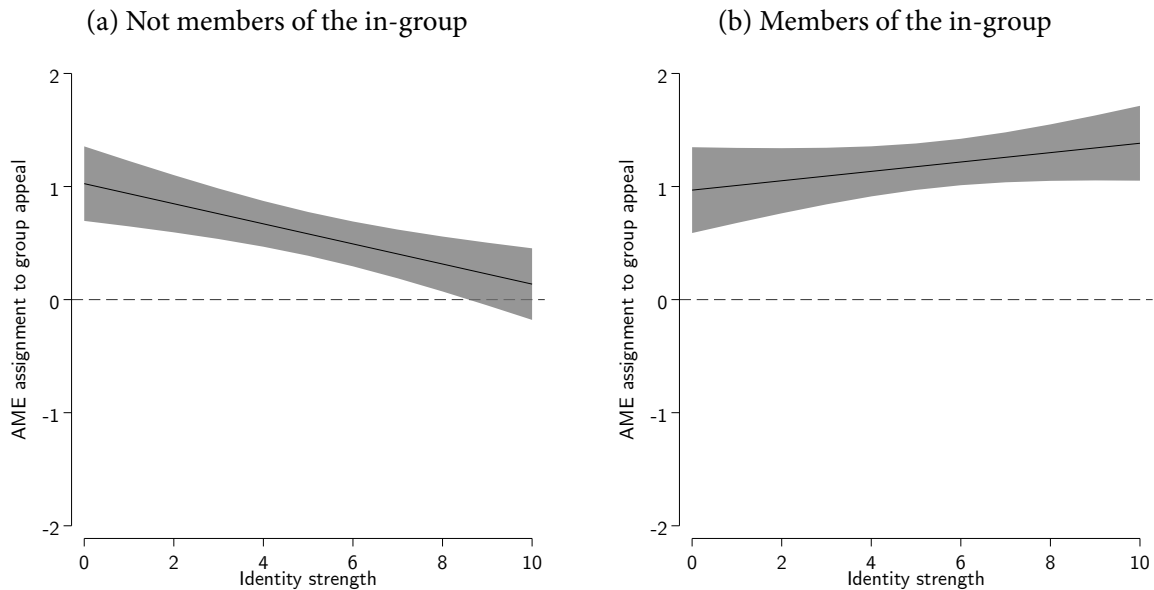
Figure 3 shows the average marginal effect of assignment to a group appeal versus the control on candidate ratings, as a function of the strength of a respondent's identity. The left-hand panel shows the relevant effects for those who are not members of the in-group, and the right-hand panel shows effects for in-group members.

We first assess the results for in-group members, for which we hypothesized that a stronger identification would lead to a more positive group appeal effect (H3a). As can be seen from the average marginal effect estimates in Figure 3, the effect of being assigned to an appeal to one's in-group increases somewhat as the group gains importance for respondents' sense of who they are. For those who rate a group characteristic "not important at all", being assigned to a group appeal increases their candidate rating by about 1.0 point compared to the control. This effect increases to about 1.4 for when the appeal concerns a group-membership that is "very important" for an individual. This conditional effect, however, is estimated quite imprecisely and is not statistically significant.

The left-hand panel in Figure 3 focuses on effects among those who are not members of the in-group. For them, we hypothesized that stronger identification with their own group would lead to a more negative group appeal effect (H3b). The AMEs of the group appeals that are shown in Figure 3 offer mixed support for this Hypothesis. On the one hand, the graph clarifies that the effect of being assigned to an appeal of a group that one is not a member of is significantly reduced as one's out-group identity gains in importance. Specifically, for a non-in-group member for whom their out-group membership is "not important at all", being assigned to a group appeal is associated with a 1.0 point higher candidate rating. This effect is reduced to 0.1 and becomes indistinguishable from zero when the out-group-membership is "very important" to one's sense of who one is. Identity strength thus significantly moderates the effect of a group appeal among those who are not members of the in-group. On the other hand, even among those whose out-group membership is "very important", a group appeal does not lead to a backlash against the candidate making the appeal.

Finally, we turn to the moderating effect of deservingness perceptions. We test the hypothesis that the higher the perceived deservingness of the group that is targeted by a group appeal, the more positive the group appeal effect should be (H4). We proposed one general hypothesis for both in-group members and others, but we allow for the possibility of different effects by assessing the moderating effect of deservingness perceptions on the impact of group appeals for both groups separately. Figure 4 shows the results, with the results for those who are not in-group members to the left and in-group effects shown to the right.

Figure 3: Impact of exposure to a group appeal among in-groups and others, conditional on identity strength



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Both graphs show the average marginal effect of being exposed to a group appeal vis-à-vis the control on candidate ratings, as a function of how deserving the group that is appealed to is perceived. The deservingness measure is coded in such a way that higher values signify that the group is perceived as deserving better conditions in life, while low values signify the group is perceived as one that already has better life conditions than they deserve.

Figure 4 clarifies that deservingness perceptions strongly moderate the effect of group appeals—among in-group members as well as others. Starting with the effects among respondents who are members of the in-group, the reward for a candidate appealing to the group increases to an effect of 2.4 points when deservingness perceptions are at the maximum value. This effect is about double the size of the overall effect of in-group appeals, when not accounting for heterogeneity in the effects. At the other end of the range of deservingness values, the right-hand graph in Figure 4 suggests that in-group members who believe that their group already has better life conditions than they deserve punish a candidate who appeals to the group. At a deservingness value of 0, this effect is -0.7 and statistically different from zero. Though it should be kept in mind that there are very few respondents who rate their own group at zero on the deservingness measure.¹⁰

As can be seen from the left-hand panel in Figure 4, the moderating effect of deservingness per-

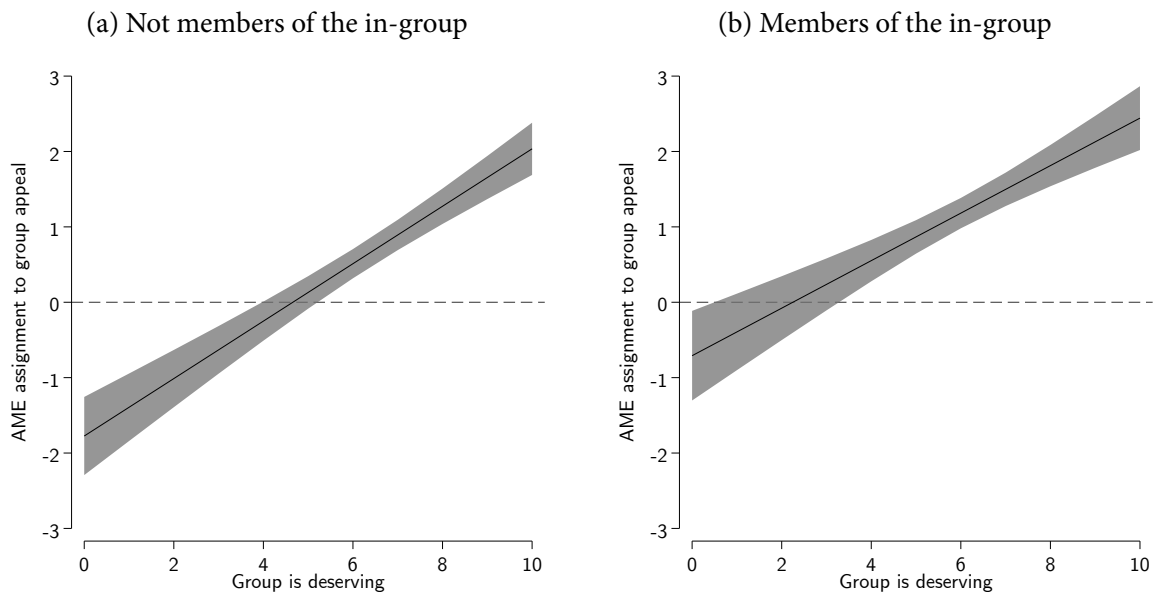
¹⁰1.3% of all in-group observations is at 0 on the deservingness measure, and another 0.7% is at 1.

ceptions is even more pronounced among respondents who are not members of the in-group. Specifically, the average marginal effect of being exposed to a group appeal of a group of which one is not a member ranges from -1.8 when the appeal concerns a group that scores 0 on the deservingness scale to 2.0 when the appeal is to a group that receives the maximum score on the deservingness scale. Depending on how one perceives the group that is appealed to, in other words, a candidate making an appeal can either lose or win up to 2 points in popularity among those who are not members of the in-group.

The effects that are plotted in Figure 4 are not only substantively very large, they also clarify the conditions under which candidates can expect a backlash from relying on group appeals: when candidates appeal to groups that are perceived as low deserving, out-group members respond negatively to the appeal. In fact, deservingness values of 5 and below are all associated with a negative average marginal effect of exposure to a group appeal among those who are not members of the in-group. For values of 4 and below, furthermore, these negative effects are statistically significant.

In summary, our analyses provide strong evidence for Hypothesis 4. For both in-group members and those who are not members of the in-group, reactions to a candidate making a group appeal vary as a function of deservingness perceptions of the group that is targeted by the appeal. Among in-group members, but especially among those who are not members of the in-group, deservingness perceptions drive whether a candidate is rewarded for making an appeal or punished for it.

Figure 4: Impact of exposure to a group appeal among in-groups and others, conditional on perceptions of deservingness



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Robustness

We verified the robustness of our results in a number of ways. First, in line with our pre-analysis plan, the main results are based on models that include a dummy variable indicating whether a respondent correctly answered the attention check question or not. As we show in Appendix G, results are substantively the same when excluding respondents who fail the attention check question.

Second, the results in Figures 3 and 4 are based on estimations that account for the role of the candidate's party by means of a variable that distinguishes Labour and Conservative candidates. When we instead include a control for whether a respondent identifies with the party of the candidate in the vignette, the results are very similar (see Appendix H).

Third, our analyses indicate that group identity strength and deservingness perceptions are important moderators of citizens' reactions to group appeals. To more clearly distill the unique effects of our theorized mechanisms, the survey also included measures of group affect using standard like/dislike questions (on 0-10 scales). In Appendix I, we show that group affect also moderates respondents' reactions to group appeals, in a pattern that resembles that of the conditioning effect of deservingness perceptions. Most importantly however, both the social identity strength and deservingness moderation effects hold when we account for heterogeneity based on respondents' affect towards the groups that are appealed to.

Fourth, we verified whether there is heterogeneity in the effects depending on the party of the candidate that is shown in the vignette. These analyses show that the effects are mostly consistent across parties though effects are generally stronger when the appeal comes from a Conservative candidate (see Appendix J).

Fifth, respondents that were assigned to the treatment arm were shown 7 vignettes, in which appeals and the candidate's party varied but that otherwise were very similar in terms of the wording. We recorded the order in which the different vignettes were shown to respondents, which is information that we can use to evaluate whether effects decay or perhaps become stronger after exposure to multiple vignettes. As can be seen from supplementary analyses that are reported in Appendix K, while the group appeal effect for the first vignette is somewhat larger, there are no substantial differences in effect sizes for vignettes shown in any order between two and seven.

Summary of Study 2 results

The results from Study 2 confirm that group appeals can be effective and increase candidate support for a wide range of groups. The main group appeal effects from Study 2 also indicate that while in-group effects are in expected directions across groups, non-in-group members do not respond as hypothesized. Across the six types of treatments (working class, people in rural areas and small towns, people without a university degree, women, the elderly and ethnic minorities), those who are not member of the in-group in fact *did* support a candidate for the group appeal. Most importantly, the

results of Study 2 shed light on the sources of variation in how citizens—both in-group members and others—respond to a candidate making a group appeal. We find that social identity strength matters somewhat, especially among those who are not members of the in-group. The results notably point out that the positive out-group effects to group appeals are concentrated among out-group members for whom their out-group membership is not an important part of their sense of who they are. The results furthermore show that deservingness perceptions strongly moderate reactions to group appeals. This holds for in-group members, but the conditioning effect of deservingness perceptions is even more pronounced among those who are not members of the in-group. The results also clarify that negative responses to a group appeal are concentrated among out-group members who think the group that is being appealed to already has better life conditions than they deserve.

Discussion: Group appeals and broad appeals

Our analyses could be taken to suggest that making use of group appeals is strategy that is almost always rewarding for the candidate making the appeal. That is, in-groups nearly always respond positively to a group appeal while those who are not in-group members mostly reward candidates too. Only when a candidate appeals to a group that is perceived as low-deserving, do we find clear evidence of the group appeal reducing support for the candidate making the appeal. These results are based on a contrast between candidates who make a group appeal and candidates that do not appeal to any group (i.e., the control).

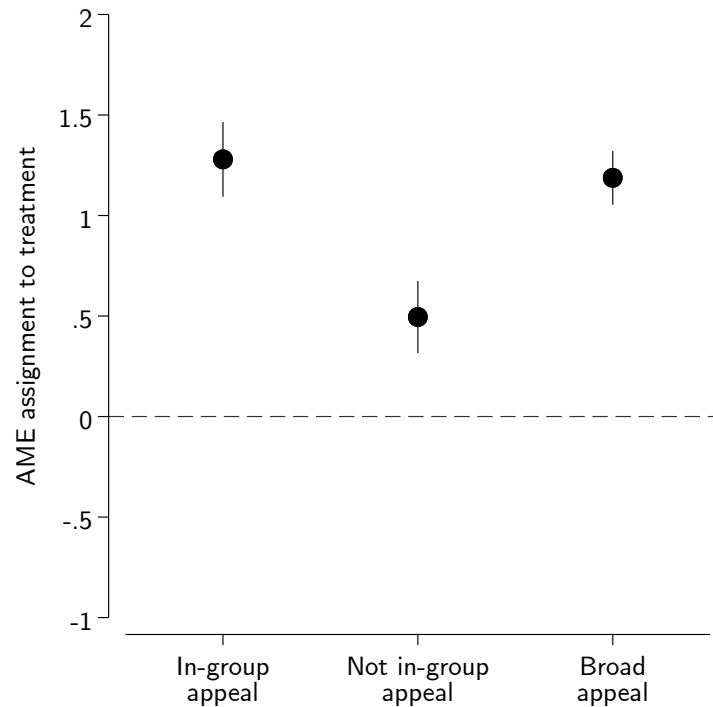
It could be argued, however, that the complete absence of appeals is not the best counterfactual for assessing the effectiveness of group appeals. The relevant point of comparison, instead, could be that of a candidate who is appealing to all citizens—without singling out a specific social group.

The data from Study 2 allow exploring this issue, as respondents in the treatment arm were not only exposed to vignettes that included an appeal to a specific group but also a vignette that included a broad appeal. Using respondents' evaluations of the candidate making such a broad appeal, we can contrast reactions following a broad appeal, to those following a group appeal.

Figure 5 shows the average marginal effect of being shown a broad appeal vignette on candidate evaluations, and contrasts this effect with that of being shown a group appeal—split out by respondents' in-group status. As can be seen from Figure 5, a candidate who makes a broad appeal is evaluated significantly and substantially more positively than a candidate not making an appeal. The effect of a broad appeal is more sizeable than that of a group appeal among non-in-group members, though the effect of an in-group appeal on candidate support, is still somewhat larger than that of the broad appeal.

We are careful not to draw too strong conclusions based on this analysis. The fact that the broad appeal vignette was included in the treatment arm, meaning respondents have seen up to six group appeals before seeing the broad appeal vignette likely makes it a more appealing option than it would

Figure 5: Effect of appeals, comparing group appeals and broad appeals



Note: Circles indicate the average marginal effect of exposure to an appeal versus being in the control group. Spikes show 95% confidence intervals.

be in isolation. Still, the results suggest that other strategies than appealing to groups can be effective for candidates too.

Conclusion

When choosing candidates or parties, voters are often guided by their social characteristics, group memberships and identities. Group voting, however, does not emerge in a vacuum but can be mobilized by politicians. One tool that parties have to clarify their position on group cleavages is to appeal explicitly to specific groups. Research that analyzes party communication has found that parties rely strongly on such strategies, with party manifestos including large number of appeals to groups (Huber, 2022; Stuckelberger and Tresch, Forthcoming; Thau, 2019).

We know much less about citizens' responses to such appeals, and the mechanisms that explain whether citizens reward candidates or parties appealing to groups. Our goal with this paper was to contribute to our knowledge about the individual-level effects of group appeals, with a focus on two important gaps in the literature. First, previous work has mostly studied the effects of group appeals with a focus on appeals based on social class. This has left open the question whether appeals to

other kinds of groups similarly shape candidate evaluations and vote choices. Second, know hardly anything about the conditions under which voters will respond positively, or negatively, to candidates appealing to groups.

By relying on vignette experiments embedded in surveys among British respondents, our work provides key insights with respect to both of these points. By doing so, we make three important contributions to the literature. First, our results indicate that candidates can successfully appeal to a wide and varied set of social groups. With only one exception (appealing to young people), we find that in-groups reward a candidate when they appeal to them. Second, we find that appealing to a specific group hardly produces push-back among those who are not members of the in-group. For most of the appeals that we studied experimentally, non-in-group members *d/* a candidate who is making an appeal to another group—though not to the same extent as in-group members. Clearly, backlash effects are not as severe as sometimes assumed. Third, beyond the average effects we find that there is a substantial amount of between-respondent heterogeneity in responses to group appeals. Social identity strength, and perceptions of deservingness in particular, condition how citizens respond to a group appeal. And under certain conditions, our analyses show, a candidate is punished when they appeal to a group. This holds especially for appeals to groups that are perceived as low deserving, for which we find that it can reduce candidate ratings up to 2 points—which signifies a substantial drop in popularity.

Our work is not without limitations. Importantly, by focusing on sources of heterogeneity based on citizens' identities and attitudes, we have left open the possibility that features of the candidate or the party making the appeal also condition effects. It is not unreasonable to assume that some candidates or parties have more credibility appealing to specific groups, and that credible appeals are more effective. Second, we have studied the effect of specific group appeals while isolating appeals and while contrasting one specific appeal at a time to the control. In real-life, however, candidates might well appeal to different groups simultaneously, and different candidates and parties can compete for a group's attention by simultaneously appealing to the same group. Under such conditions, the effects of a group appeal are likely more muted than what is suggested by the effect sizes reported in this paper. Finally, we have only scratched the surface of the role of broad appeals and how these can be an alternative to appeals to specific groups. Unfortunately, these are all points that our experimental design cannot provide conclusive evidence for. More work is needed on the role and the effects of group appeals, and we hope that our research motivates the field to go further in that direction.

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Supplementary Materials

“The Effectiveness of Group Appeals: Identity Strength and Perceptions of Deservingness”

The Supplementary Materials include the following information:

- A (p. 2): Study 1, full estimates.
- B (p. 3): Effect of an appeal to young people among different age groups, Study 1.
- C (p. 4): Effects on likelihood to vote for candidate, Study 1.
- D (p. 8): Effects of Study 1 by party: Labour versus Conservative candidate, Study 1.
- E (p. 12): Simplified vignette, pilot test results.
- F (p. 14): Coding of groups and descriptive information moderators, Study 2.
- G (p. 17): Excluding respondents who failed the attention check, Study 2.
- H (p. 20): Accounting for shared partisanship, Study 1 and Study 2.
- I (p. 24): The role of group affect, Study 2.
- J (p. 27): Effects by party: Labour versus Conservative candidate, Study 2.
- K (p. 31): Accounting for vignette order, Study 2.

A Study 1, full estimates

Table A.1: Effect of different types of group appeals on in- and out-groups, OLS estimates

	(1)	(2)	(3)	(4)
Susan Smith (ref. David)	0.005 (0.184)	-0.098 (0.176)	-0.190 (0.183)	-0.472 (0.191)
Labour party (ref. Conservative)	0.294 (0.186)	0.982 (0.178)	0.518 (0.183)	0.752 (0.192)
Working class	-0.104 (0.267)			
Working class appeal	0.988 (0.249)			
Working class Working class appeal	0.619 (0.372)			
Lives in rural area/small town		0.164 (0.257)		
Rural area appeal		0.453 (0.291)		
Lives in rural area Rural area appeal		0.908 (0.364)		
Non-university graduate			0.080 (0.262)	
Appeal to non-university graduates			0.349 (0.287)	
Non-university graduate Appeal to non-univ. graduates			0.755 (0.370)	
35 years				-0.218 (0.308)
Appeal to young people				-0.691 (0.221)
35 years Appeal to young people				0.964 (0.446)
Constant	4.873 (0.228)	4.404 (0.245)	4.745 (0.257)	4.872 (0.207)
<i>N</i>	579	600	611	594
<i>R</i> ²	0.086	0.130	0.061	0.052

Standard errors in parentheses

$p < 0.05$, $p < 0.01$, $p < 0.001$

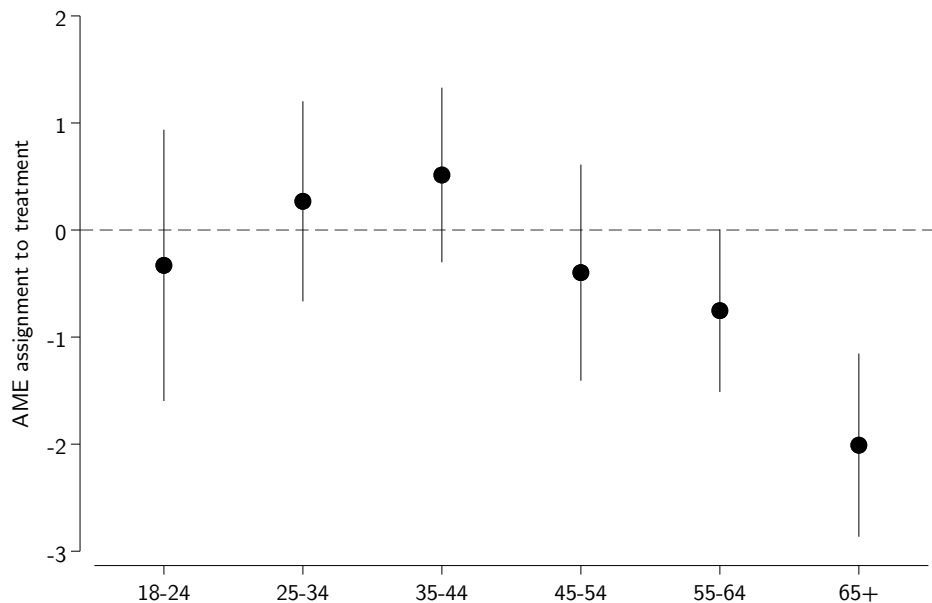
B Effect of an appeal to young people among different age groups, Study 1

The main results of the effect that an appeal to young people have rely on a dichotomy between ‘young’ and ‘not young’ respondents for which we arbitrarily set the cut-off at 35 years old. In this Appendix, we verify whether the results, and the absence of an increase in candidate support among the in-group in particular is driven by this cut-off.

To gain more insights on the ways in which different age-groups respond to this particular treatment, we assess its effect among six different age groups: the 18–24, 25–34, 35–44, 45–55, 56–64 and 65+ year olds.

Figure B.1 summarizes the results. They clarify that there is not a single age group for which candidate support significantly increases when exposed to the treatment. The Figure also clarifies that the negative reaction among out-groups is most strongly driven by how respondents over 65 years old respond to a candidate appealing to young people.

Figure B.1: Impact of exposure to an appeal to young people among six different age groups



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

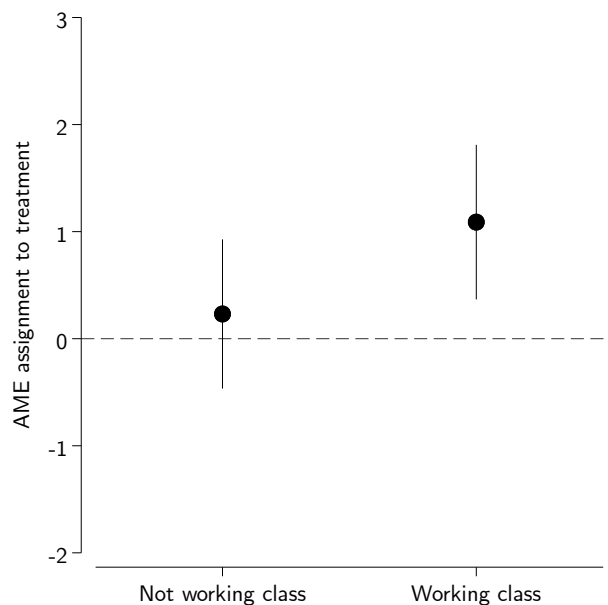
C Effects on likelihood to vote for candidate, Study 1

The results for Study 1 that are reported in the manuscript are those with respect to evaluations of the candidate. Candidate ratings are based on a question asking respondents to rate a candidate with the political views like those of the hypothetical candidate presented in the vignette, on a scale from 0 (= thinks very poorly of him/her) to 10 (= thinks very highly of him/her).

The survey also included a second dependent variable, however, tapping more directly electoral support. For this measure, respondents were asked to indicate how likely they would be to vote for the hypothetical candidate, should they run in their constituency at the next election. Respondents had to indicate their likelihood on an 11-point scale, from 0 (= not likely at all) to 10 (= very likely).

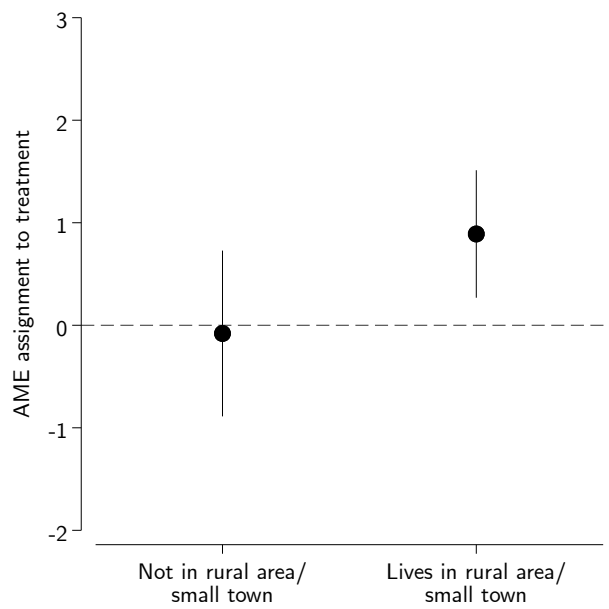
In this Appendix, we show the results of the different treatments with respect to this alternative dependent variable. Not surprisingly, effects are more muted for voting likelihood than for candidate support. The main patterns, however, are very similar to those of the results for candidate support. In particular, for appeals to the working class, rural areas and non-university graduates these analyses also provide more evidence in line with H1 than there is evidence of a backlash (H2). For vote likelihood as well patterns differ when assessing the impact of the appeal to young people.

Figure C.1: Impact of exposure to a working class appeal among working class and non-working class respondents



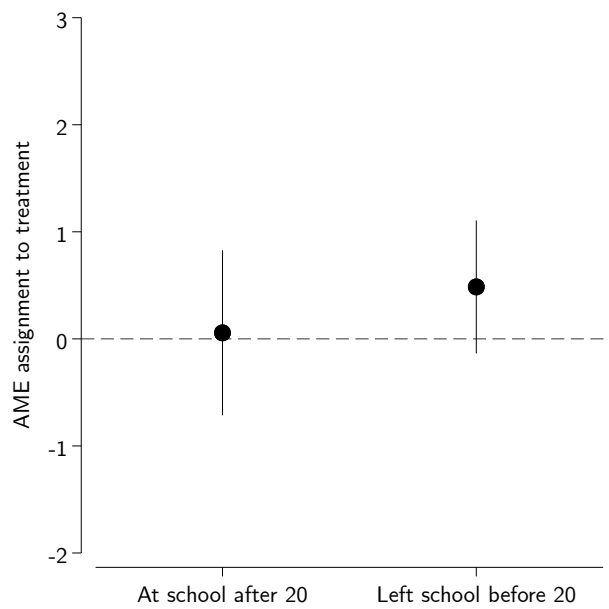
Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

Figure C.2: Impact of exposure to an appeal to rural areas among people living in rural areas/small towns and others



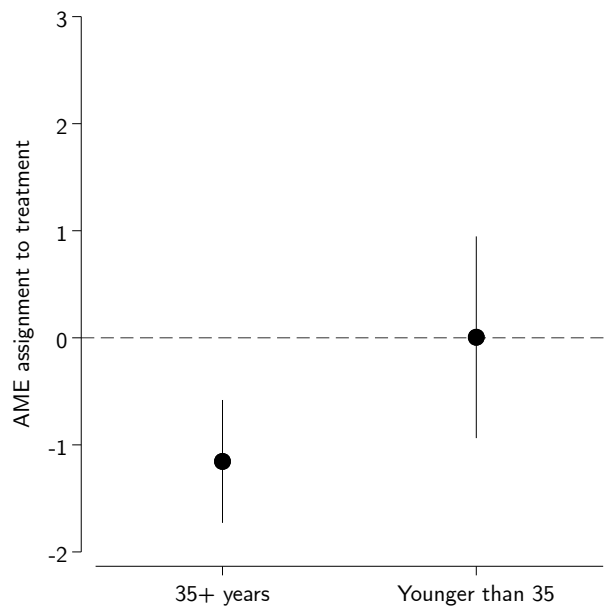
Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

Figure C.3: Impact of exposure to an appeal to non-university graduates among non-university and university graduates



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

Figure C.4: Impact of exposure to an appeal to young people among -35 year olds versus others

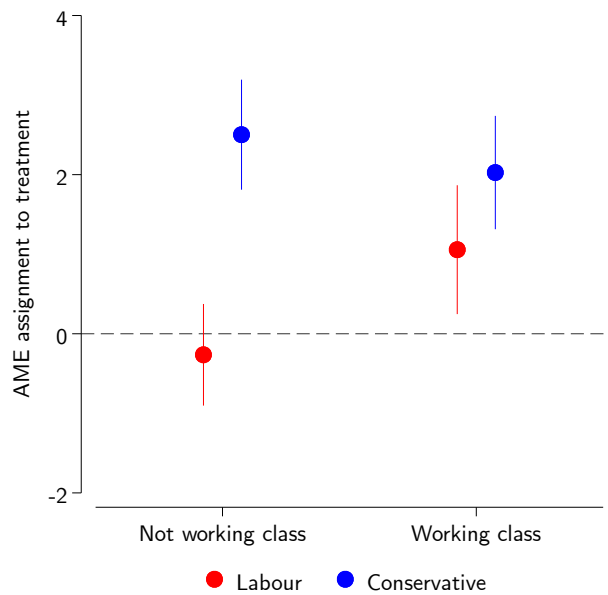


Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

D Effects by party: Labour versus Conservative candidate, Study 1

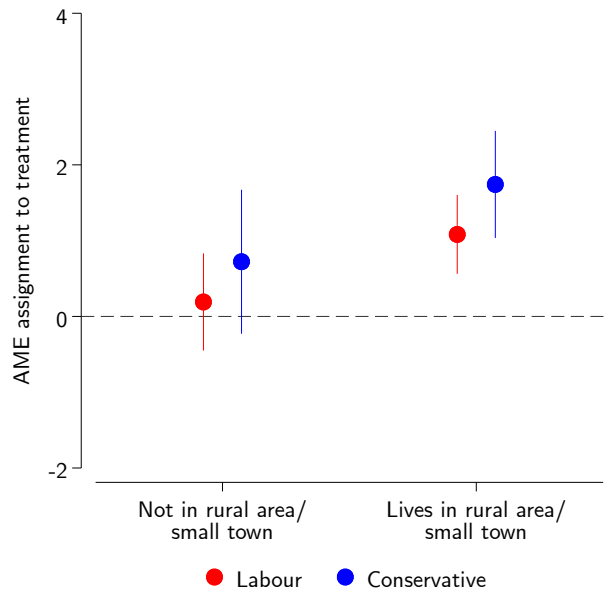
In this Appendix, we replicate the main results of Study 1 broken down by the party of the candidate shown in the vignette (i.e., Labour or Conservative). We again visualize the results in terms of average marginal effects. These estimates are based on regression analyses including a three-way interaction between respondents' group membership, assignment to an appeal, and assignment to a Conservative (vs. Labour) candidate.

Figure D.1: Impact of exposure to a working class appeal among working class and non-working class respondents, effects by party of the candidate



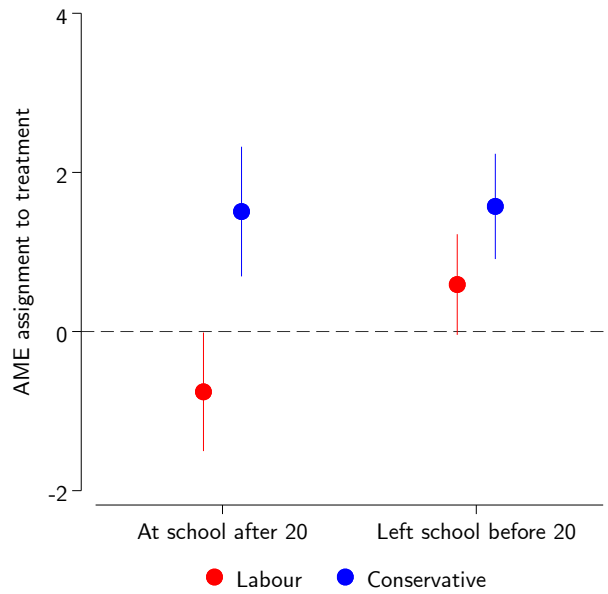
Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals. Red coefficients indicate the effects for a Labour candidate and blue coefficients signify the effect for a Conservative candidate.

Figure D.2: Impact of exposure to an appeal to rural areas among people living in rural areas/small towns and others, effects by party of the candidate



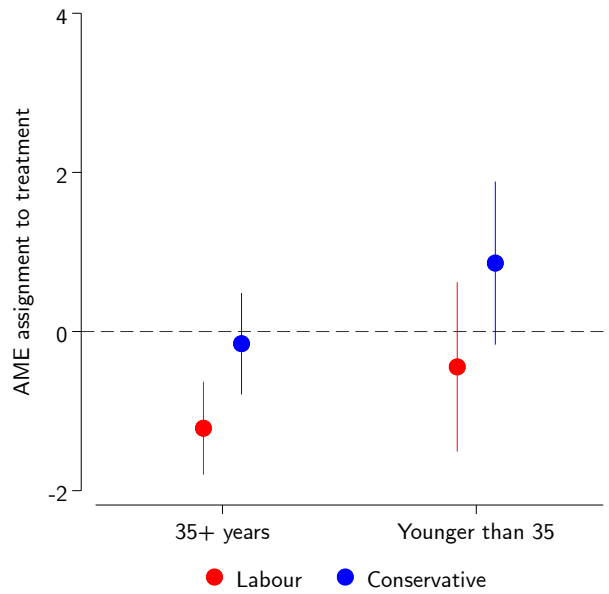
Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals. Red coefficients indicate the effects for a Labour candidate and blue coefficients signify the effect for a Conservative candidate.

Figure D.3: Impact of exposure to an appeal to non-university graduates among non-university and university graduates, effects by party of the candidate



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals. Red coefficients indicate the effects for a Labour candidate and blue coefficients signify the effect for a Conservative candidate.

Figure D.4: Impact of exposure to an appeal to young people among -35 year olds versus others, effects by party of the candidate



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals. Red coefficients indicate the effects for a Labour candidate and blue coefficients signify the effect for a Conservative candidate.

E Simplified vignette, pilot test results

Study 2 relies on a simplified version of the vignettes that focuses solely on an appeal to an in-group without explicitly contrasting them to a specific out-group. We pilot-tested whether not including this contrast would affect responses to a group appeal. This test focused on a working class appeal, as this is the type of appeal that has been studied most in previous work.

The pilot survey was fielded in February 2022 on the Prolific platform among a sample of 1,002 respondents in the United Kingdom. We divided respondents in three groups: (1) a control group that only received information on the party of the candidate; (2) a treatment group that was shown a vignette with party information and in which the candidate appealed to the working class and contrasted the interests of the working class to those of the upper middle class; (3) and a second treatment group that was provided with information on the candidate's party and a simplified appeal that focused solely on the in-group (i.e., the working class).

The three kinds of vignettes read as follows:

5a` fcb^h[Y VFW

The candidate is a member of the [Labour/Conservative] Party.

5a` fcb^h[Y VFW

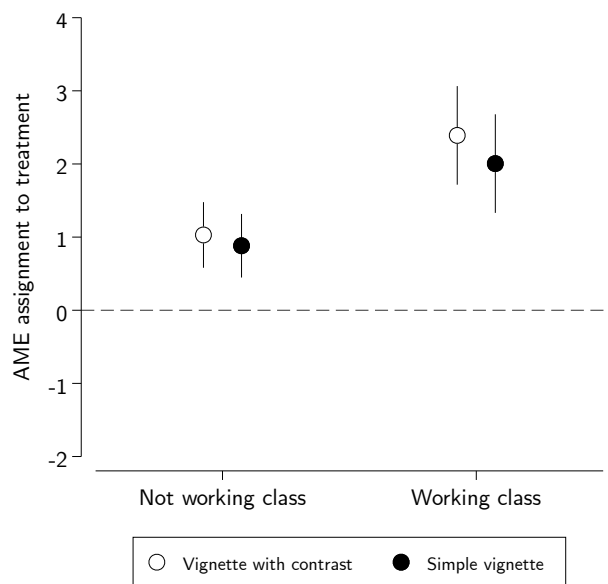
The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: "Too much attention has been given to the upper middle class in recent political debates. We in the [Labour/Conservative] Party believe it is time for politicians to prioritize the working class. As a Member of Parliament, I will work to better represent the interests of the working class."

E[b{ Wi ad][YUSeeh[Y VFW

The [Xth] candidate is a member of the [Labour/Conservative] Party and recently said: "We in the [Labour/Conservative] Party believe it is time for politicians to prioritize the working class more. As a Member of Parliament, I will work to better represent the interests of the working class."

Figure E.1 summarizes the results for this test.

Figure E.1: Impact of exposure to a working class appeal among working class and non-working class respondents, contrast between the original and a simplified vignette



Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

F Coding of groups and descriptive information moderators, Study 2

In this Appendix, we provide a bit more information on the measurement of the key variables and moderators in Study 2.

Testing our hypotheses implies interacting a respondent’s status as in-group member with assignment to a vignette appealing to their group. Table F.1 provides details on how we operationalise in-group membership for the different vignettes in Study 2.

Table F.1: Coding of in-groups for the different vignettes

Group	Coding
Working class	1 = lower class, working class 0 = lower middle class, middle class, upper middle class, upper class
People in rural areas and small towns	1 = rural area or village, small town 0 = middle size town, large town or city
People without university degrees	respondents with degrees that are not university degrees on Q4 0 = respondents who indicate a university degree on Q4 respondents who indicate ‘don’t know’ or ‘prefer not to say’ on Q4 are coded as missing
Women	1 = female 0 = male, other
Elderly	1 = 65+ 0 = 64 years old or younger
Ethnic minority	1 = all options except for options ‘White British’ and ‘Any other white background’ on Q6 0 = options ‘White British’ and ‘Any other white background’ on Q6 respondents who indicate ‘prefer not to say’ on Q6 are coded as missing

A first key moderator for our analyses is the strength of group identities. To capture identity strength, the survey included a battery of items asking respondents to indicate on a scale from 0 to 10 how important different group characteristics were to their sense of who they are. Table F.2 reports descriptive statistics for these indicators of identity strength.

The second moderator of interest are perceptions of deservingness. To capture these, we asked respondents to indicate whether they think that most people in different groups have poorer life conditions than they deserve, better life conditions than they deserve or just about the life conditions that they deserve? Respondents provided answers on a scale from 0 to 10, where 0 meant ‘poorer life conditions than they deserve’, 5 meant ‘about the life conditions that they deserve’ and 10 signifies ‘better

Table F.2: Descriptives for identity strength measures, Study 2

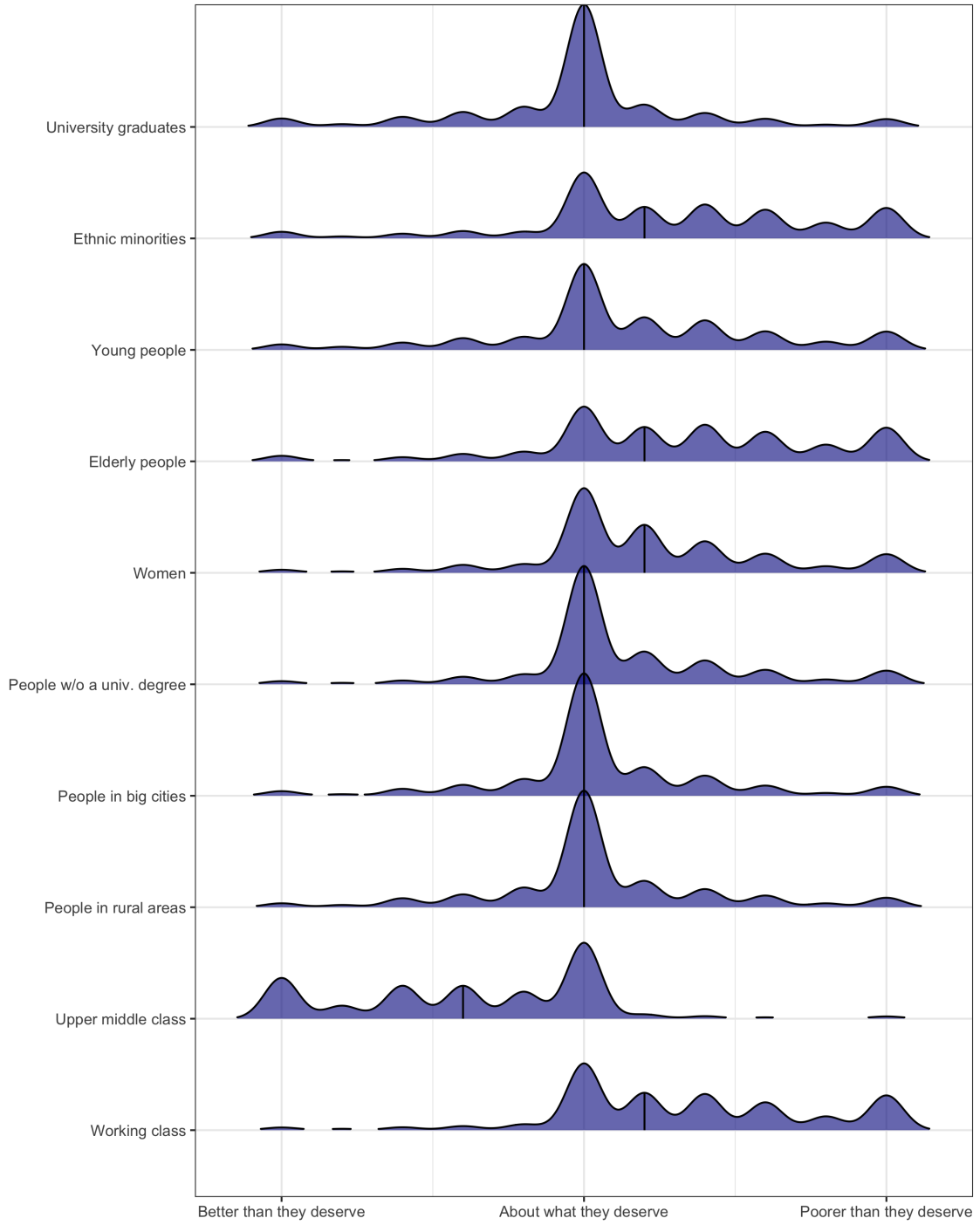
	Mean	SD	Min	Median	Max	n
Importance class	4.86	3.04	0.00	5.00	10.00	3200
Importance ethnic or racial background	5.15	3.32	0.00	5.00	10.00	3199
Importance place of living	5.64	2.98	0.00	6.00	10.00	3200
Importance gender	6.34	3.27	0.00	7.00	10.00	3199
Importance age group	5.31	2.88	0.00	5.00	10.00	3200
Importance educational background	5.50	2.94	0.00	6.00	10.00	3200

life conditions than they deserve.’ This measure was reverse coded, so that higher values correspond to more deserving groups.

The survey asked to indicate deservingness perceptions for the groups that are appealed to in the vignettes, but also for a number of additional groups—which we expected would be perceived as less deserving overall than the groups that are of interest to us. Figure F.1 shows the distribution of answers on these items (that were shown in random order), in the form of a ridgeline plot. The line graph indicates the density of responses, and the vertical line in each subgraph shows the median value for that particular item.

As can be seen from Figure F.1, of all the groups, the working class is the group that is on average perceived a most deserving, followed by the elderly and ethnic minorities. At the other end of the scale, the upper middle class is perceived as the group for which the largest number of respondents rate them close to the ‘have better life conditions than they deserve’ end of the scale.

Figure F.1: Perceptions of deservingness for different social groups, Study 2



G Excluding respondents who failed the attention check, Study 2

The main results for Study 2 include a control for whether respondents answered an attention check question correctly. As an alternative way to dealing with variation in levels of attention, in this Appendix we replicate the main results while excluding from the analyses all respondents who did not answer the attention check question correctly.

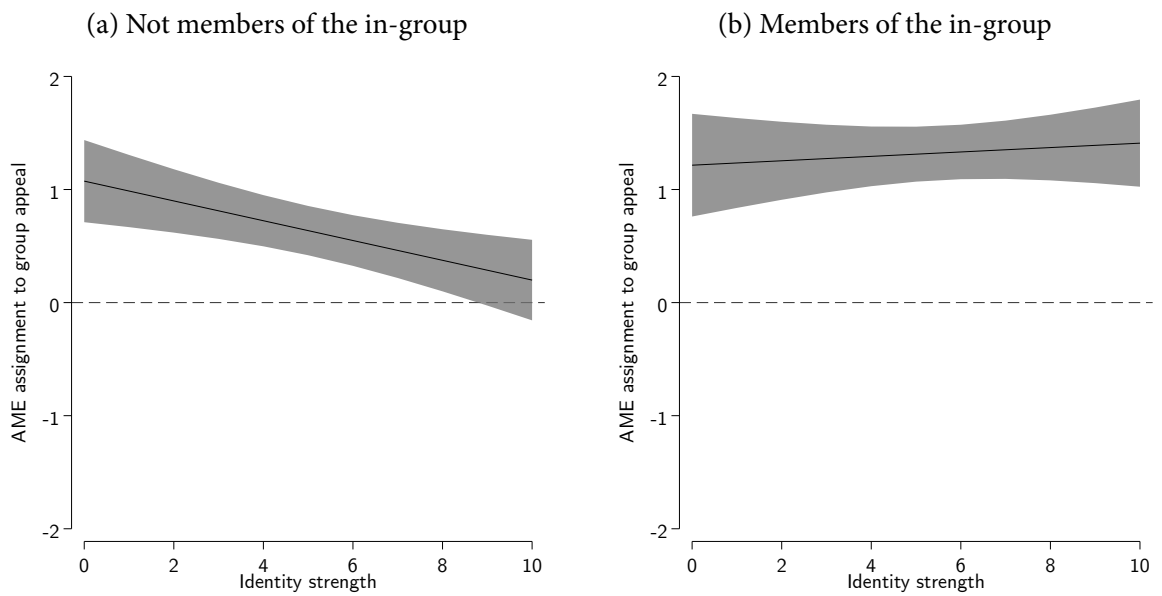
Table G.1: Explaining candidate evaluations, impact of exposure to a group appeal – pooled Study 2 results (excluding respondents who failed the attention check question)

	(1)	(2)
In-group member	0.127 (0.081)	0.112 (0.066)
Group appeal	0.615 (0.111)	0.642 (0.100)
In-group member Group appeal	0.714 (0.101)	0.693 (0.088)
Labour candidate	1.022 (0.090)	
Partisan of candidate's party		2.429 (0.081)
Constant	4.203 (0.113)	4.023 (0.092)
<i>N</i>	13093	13093
<i>R</i> ²	0.073	0.198

Standard errors (in parentheses) are clustered by respondent.

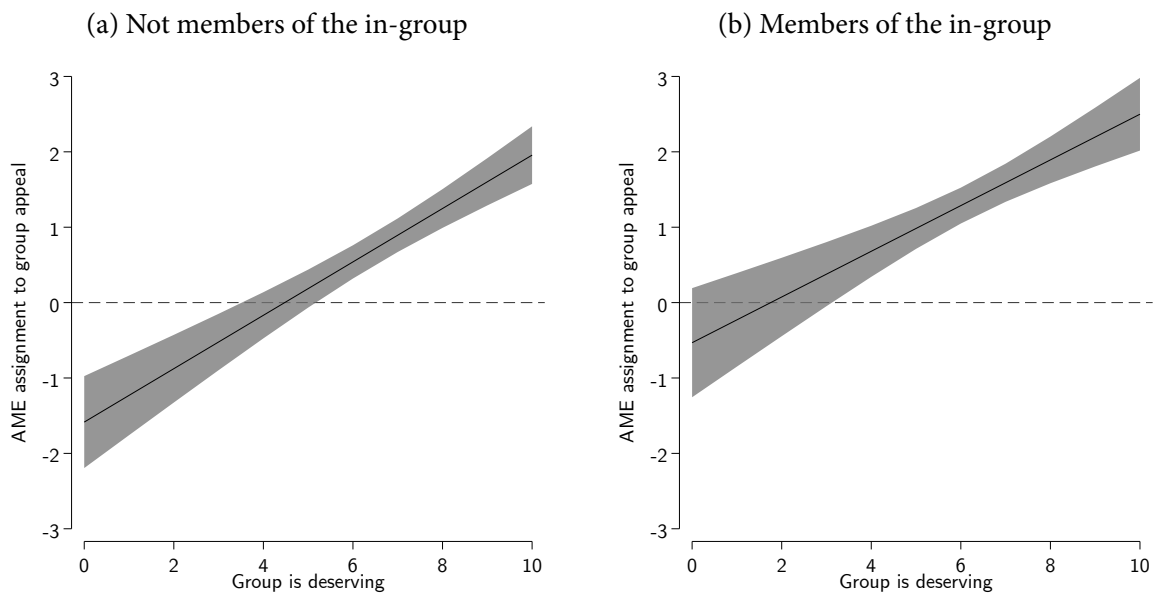
$p < 0.05$, $p < 0.01$, $p < 0.001$

Figure G.1: Impact of exposure to a group appeal among in-groups and others, conditional on identity strength (excluding respondents who failed the attention check question)



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Figure G.2: Impact of exposure to a group appeal among in-groups and others, conditional on perceptions of deservingness (excluding respondents who failed the attention check question)



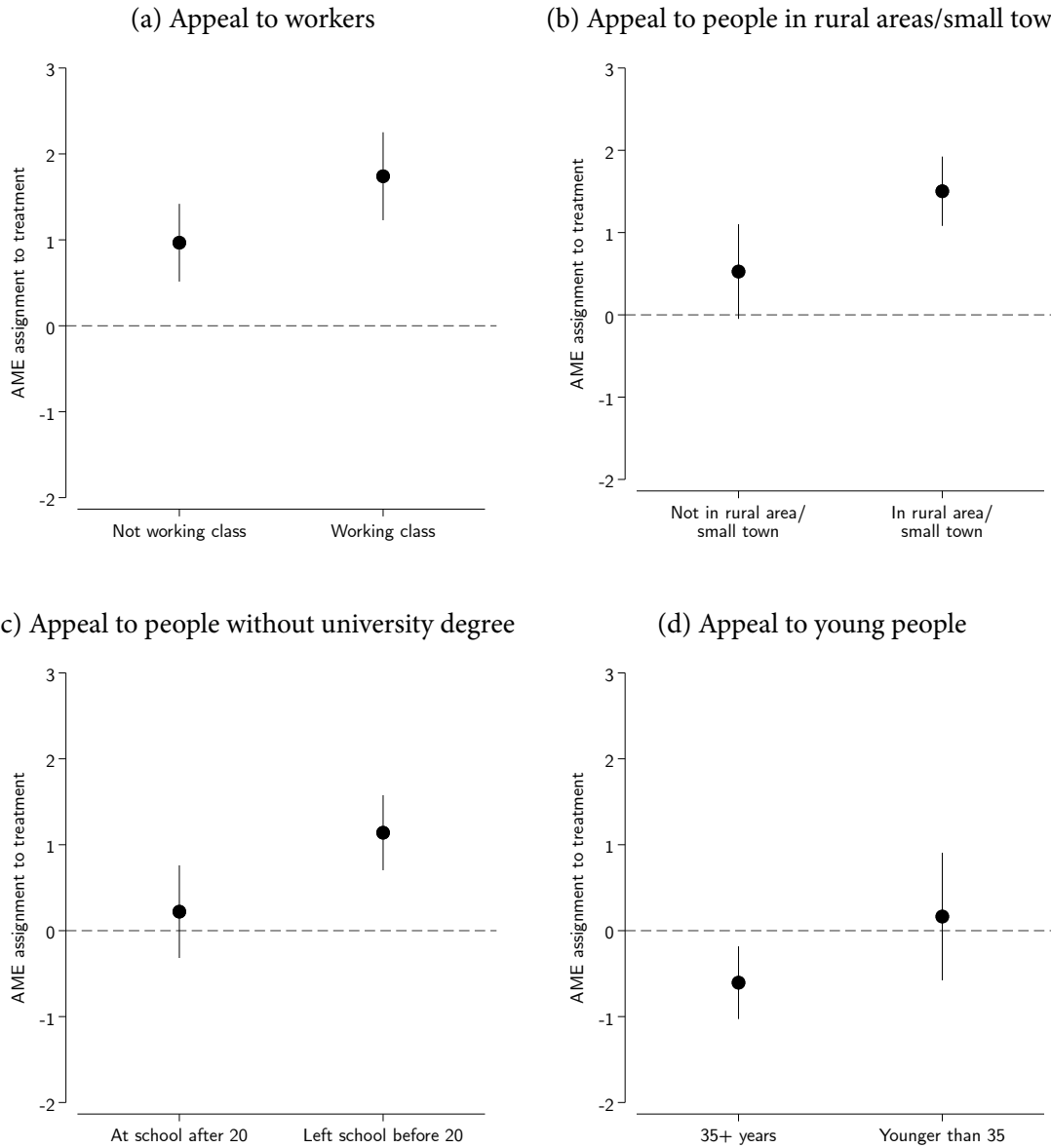
Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

H Accounting for shared partisanship, Study 1 and Study 2

The main results for Study 1 are based on estimates that include a control for the candidate's party. Here, we verify whether conclusions hold when we replace this variable by an indicator of whether a respondent is a partisan of the candidate's party. The results of this alternative specification, which are visualized in Figure [H.1](#), are essentially the same as those shown in the manuscript.

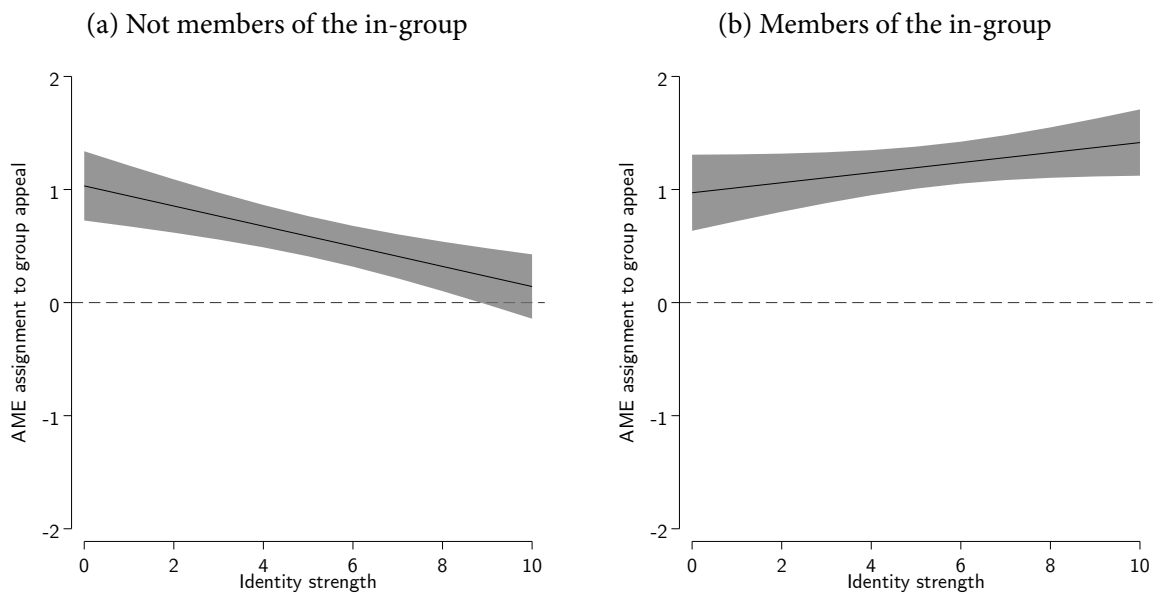
The main results for Study 2 also account for whether the candidate in the vignette is a candidate of Labour or of the Conservative Party. In the manuscript, we furthermore show that the main group appeal effects for Study 2 are very similar when we replace this variable by a measure of shared partisanship (i.e., whether a respondent is a partisan of the candidate's party). In this Appendix, we show that the moderation effects are also very similar when we use a control for shared partisanship instead of the basic control for a candidate's party (see Figures [H.2](#) and [H.3](#)).

Figure H.1: Impact of exposure to a group appeal among in-groups and others, Study 1 results (controlling for shared partisanship)



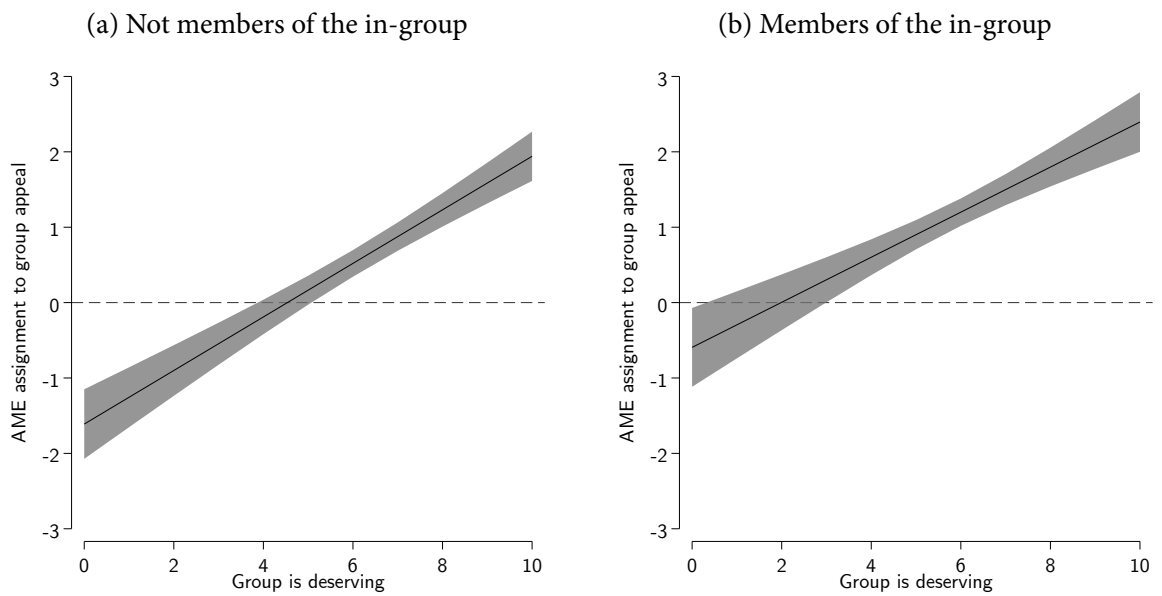
Note: Circles indicate the average marginal effect of exposure to a group appeal versus being in the control group. Spikes show 95% confidence intervals.

Figure H.2: Impact of exposure to a group appeal among in-groups and others, conditional on identity strength (controlling for shared partisanship)



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Figure H.3: Impact of exposure to a group appeal among in-groups and others, conditional on perceptions of deservingness (controlling for shared partisanship)



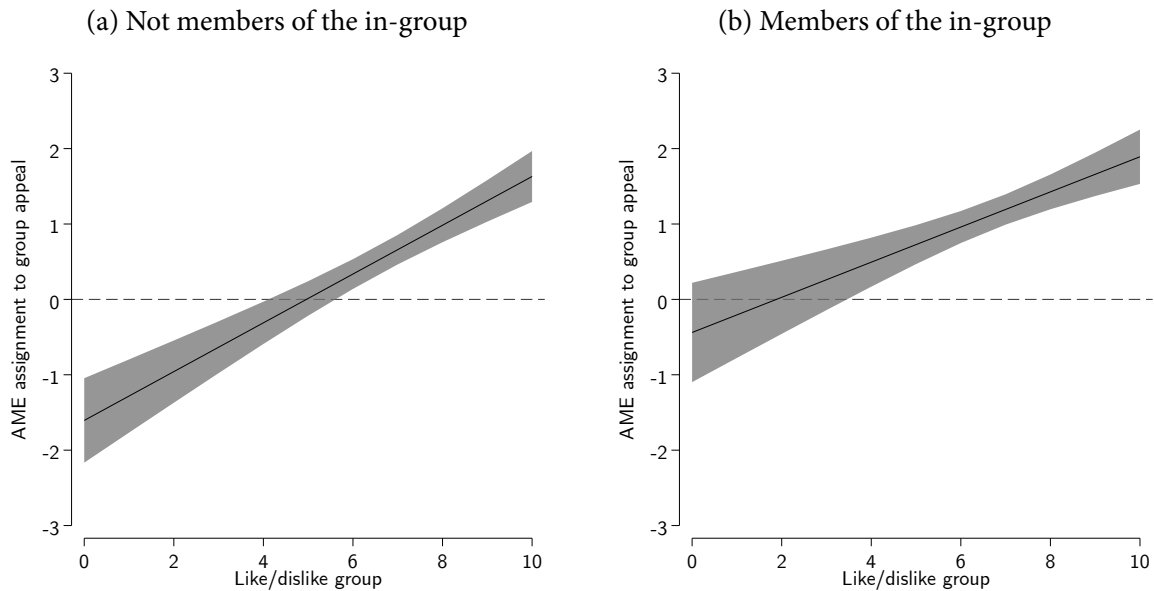
Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

I The role of group affect, Study 2

The results of Study 2 point out that social identity strength, and in particular perceptions of deservingness perceptions are important moderators of citizens' reactions to group appeals. To more clearly distill the unique effect of these moderators that we theorized would condition the effect of group appeals, we also measured group affect using standard like/dislike questions (on 0-10 scales).

Perhaps unsurprisingly, when using group affect as a moderator in the models, we obtain a picture that resembles that of the conditioning effect of deservingness perceptions. As can be seen from Figure I.1, citizens reward candidates who appeal to groups they like and out-groups in particular punish a candidate who is appealing to a group they dislike strongly (low values on the like/dislike scale).

Figure I.1: Impact of exposure to a group appeal among in-groups and others, conditional on group affect



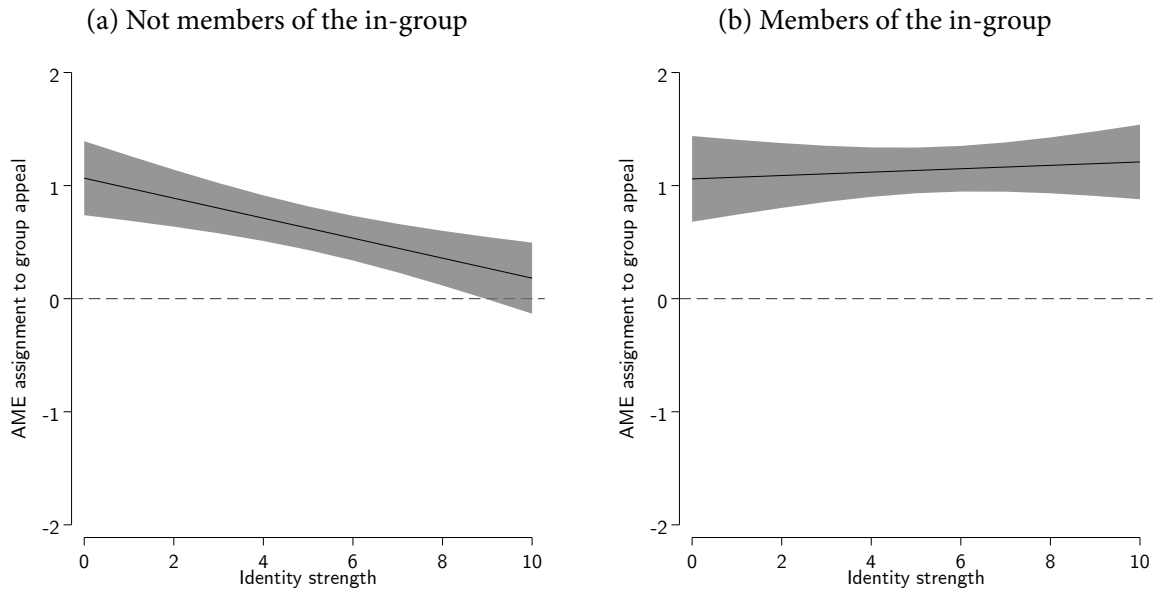
Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Of most concern to us is whether the conditioning effects of identity strength and deservingness perceptions still hold when we account for the conditioning role of like/dislike ratings. To that end, we estimate models on the stacked data that include an interaction between identity strength or deservingness perceptions and in-group membership as well as an interaction between like/dislike ratings and in-group membership. Figure I.2 summarizes the results for identity strength, while Figure I.3 shows the relevant results for the conditioning role of perceptions of deservingness. As can be seen from these graphs, the estimated effects are very similar to the main results presented in the

manuscript.

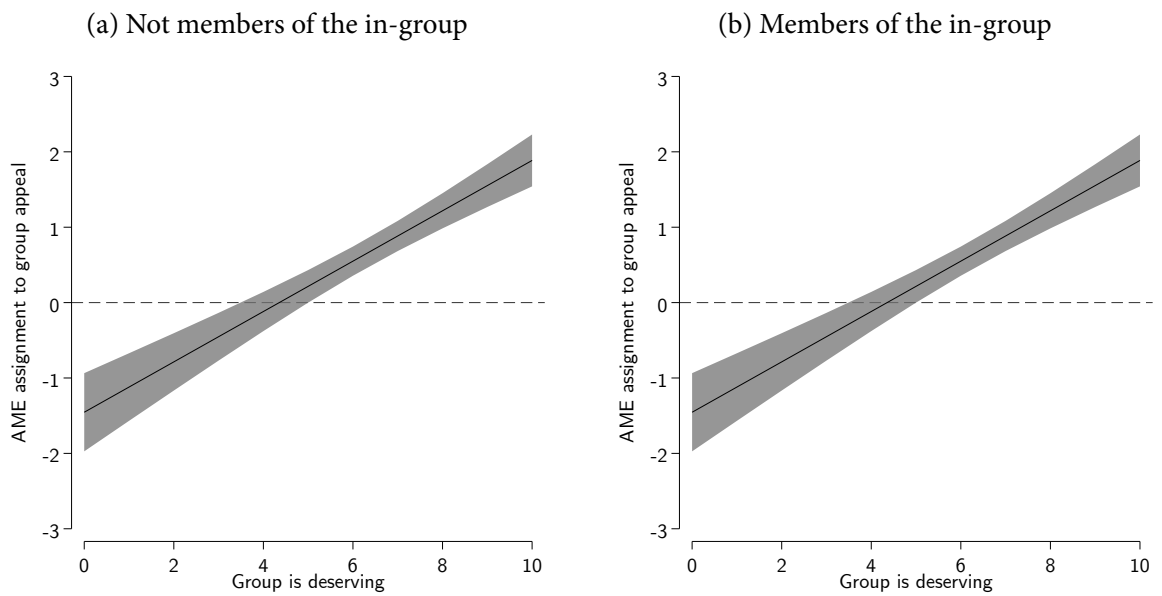
Even though group affect correlates with perceptions of deservingness and has a similar impact on citizens' responses to group appeals, the deservingness findings that we present appear not to be driven by feelings of group affect.

Figure I.2: Impact of exposure to a group appeal among in-groups and others, conditional on identity strength (accounting for the conditioning effect of group affect)



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Figure I.3: Impact of exposure to a group appeal among in-groups and others, conditional on perceptions of deservingness (accounting for the conditioning effect of group affect)



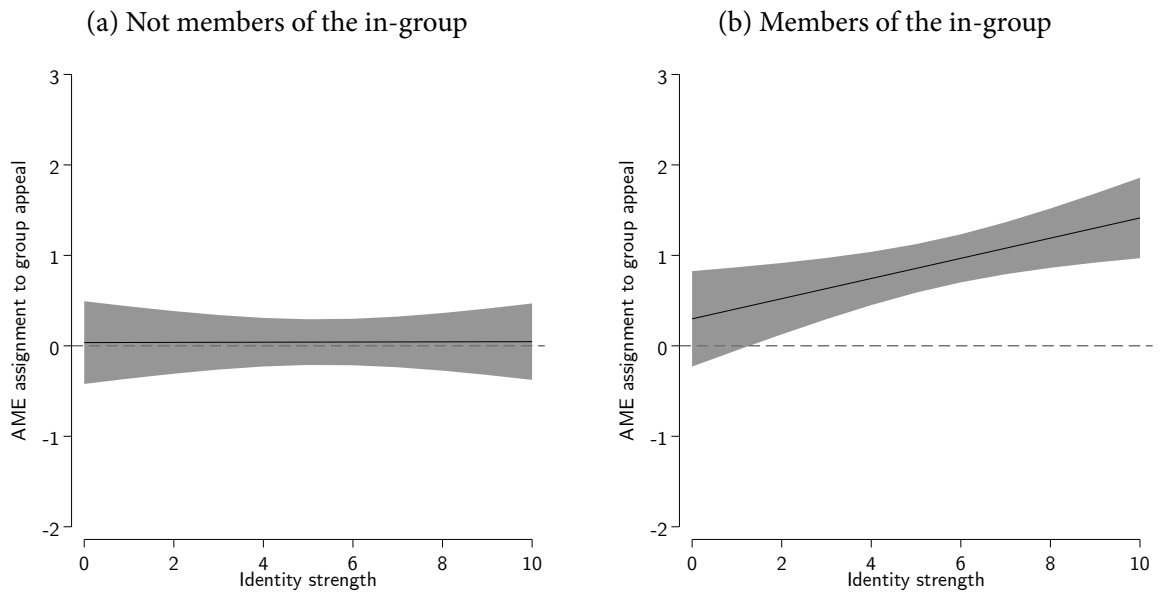
Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

J Effects by party: Labour versus Conservative candidate, Study 2

In the main manuscript, we show the conditioning effects of group identity strength and deservingness perceptions while controlling for the party of the candidate making the group appeal. In this Appendix, we evaluate whether there are indications of heterogeneous effects based on the candidate's party. To do so, we added interactions with the Labour party variable. We show the main results, in visual form, for Labour and Conservative candidates separately.

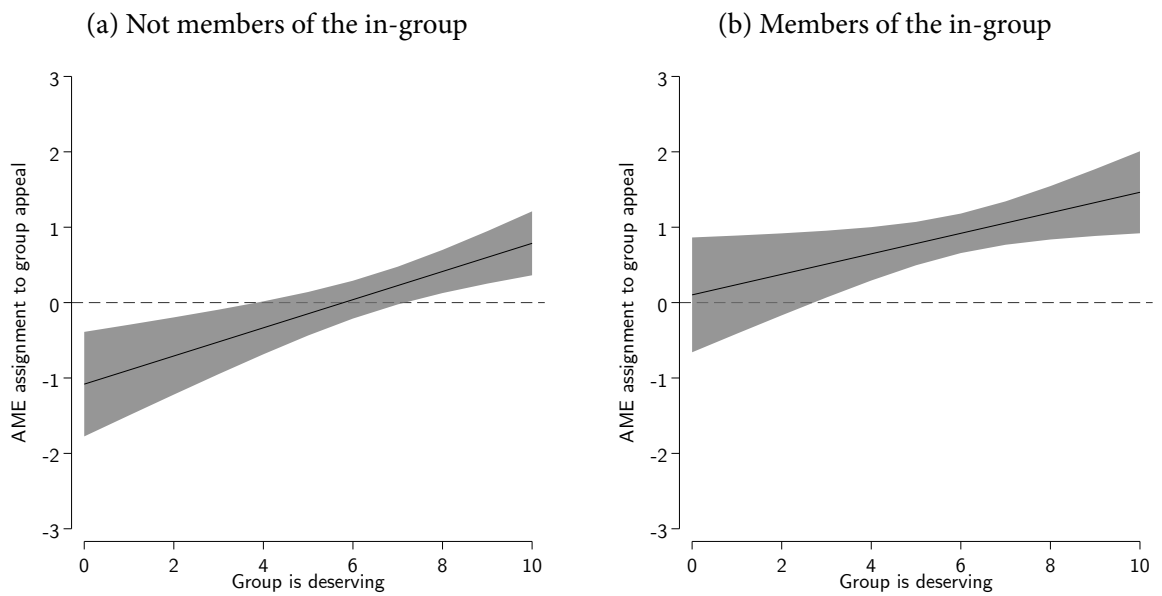
The most important take-away from these analyses is that effects tend to be stronger when the appeal comes from a Conservative candidate than when the candidate belongs to Labour. Given that we had no a-priori expectations about heterogeneity based on the candidate's party, we are careful not to draw too strong conclusions from these results. However, the results are suggestive of group appeals being more effective when they are 'surprising', with a Conservative candidate appealing to a low-status group.

Figure J.1: Impact of exposure to a group appeal among in-groups and others, conditional on identity strength – Labour candidate



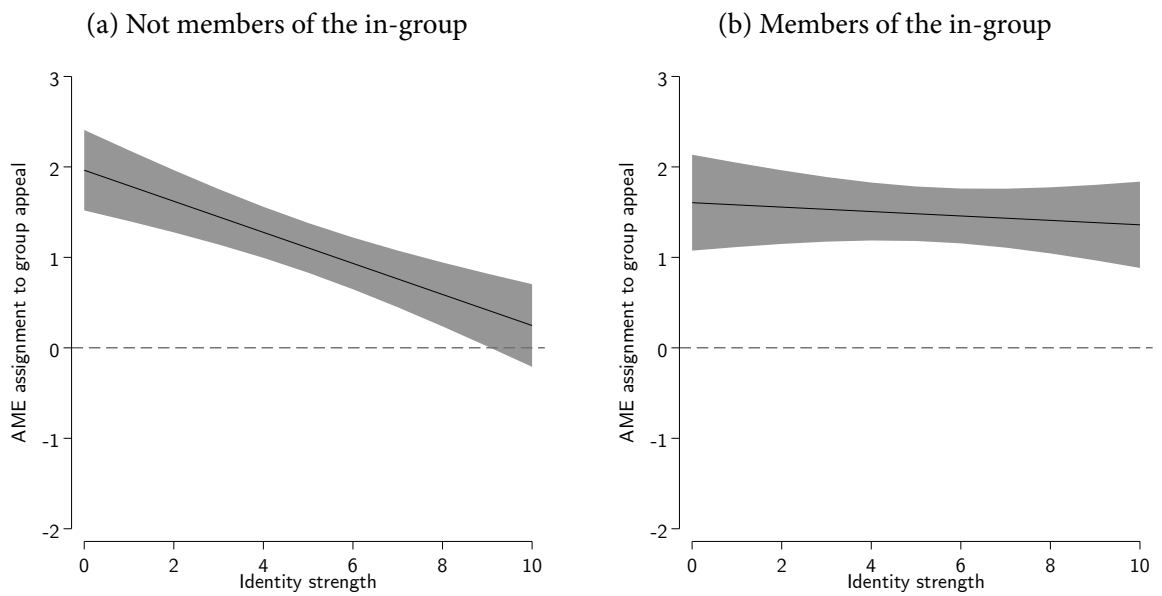
Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Figure J.2: Impact of exposure to a group appeal among in-groups and others, conditional on perceptions of deservingness – Labour candidate



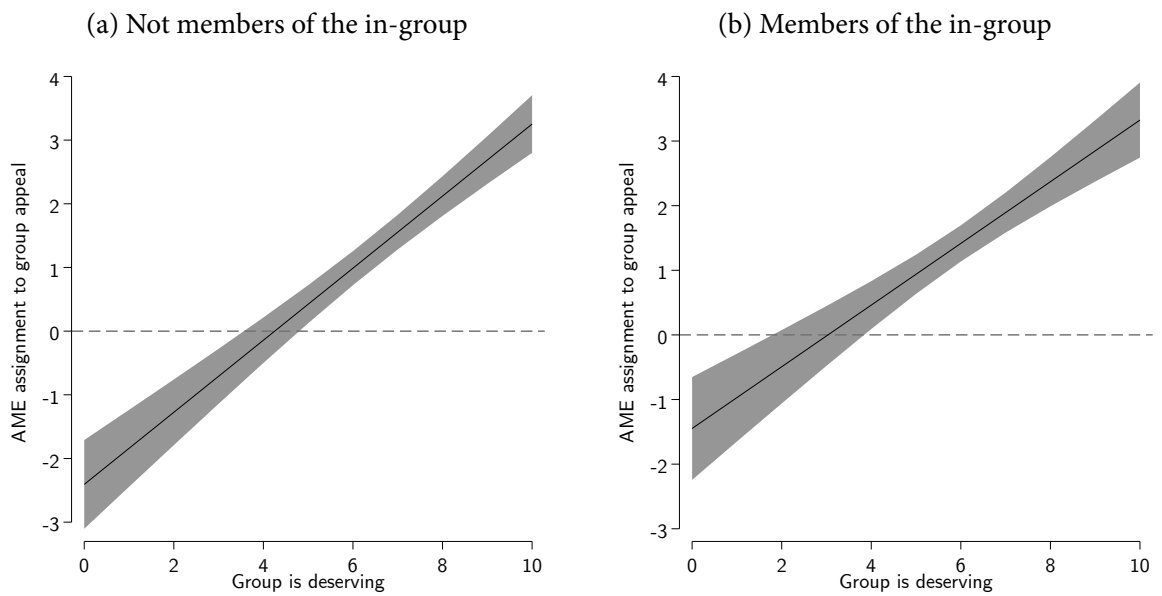
Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Figure J.3: Impact of exposure to a group appeal among in-groups and others, conditional on identity strength – Conservative candidate



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

Figure J.4: Impact of exposure to a group appeal among in-groups and others, conditional on perceptions of deservingness – Conservative candidate



Note: Solid line indicates the average marginal effect of assignment to a group appeal versus the control. The shaded area indicates 95% confidence intervals.

K Accounting for vignette order, Study 2

In Study 2, respondents who were assigned to the treatment arm were shown 7 vignettes, in which appeals and the candidate's party varied but that otherwise were very similar in terms of the wording. Here, we evaluate whether effects decay or perhaps become stronger after exposure to multiple vignettes.

We explored this possibility in the stacked dataset, with a focus on respondents who were assigned to the treatment arm. We then estimate a model explaining candidate support, in which we interacted in-group membership with the order in which a vignette was shown to a respondent—which is a categorical variable that ranges from 1 to 7. In line with the standard estimation, the model includes controls for the candidate's party and for whether the respondent answered the attention check question correctly.

Figure K.1 shows the average marginal effect of in-group membership (vs. not being an in-group member) on the evaluations of candidates making an appeal by the order in which vignettes were presented. The effect for the first vignette appears to be the largest, but none of the AMEs differs significantly from the AME for the vignette that is shown first.

Figure K.1: AME of in-group membership on candidate evaluation by vignette order

